

ELECTRIC REFRIGERATION NEWS

The business newspaper of the electric refrigeration industry

VOL. I, No. 20

DETROIT, MICHIGAN, JULY 6, 1927

PRICE FIVE CENTS

APARTMENT HOUSE ICE GRAFT EXPOSED

Dealers Pay For Territory and Are Protected From Competition

As much as \$2,000 has been paid to real estate agents, owners, and superintendents for the privilege of selling ice in Astoria apartment houses, according to testimony given by an ice dealer at an inquiry into monopoly charges in Queens County Court, says the *New York Herald-Tribune* of June 15.

Testimony showed that the small dealer, instead of having to struggle to survive, was often the owner of a lucrative business, because of the protection afforded him in preventing infringement upon his business by competitors. The Metropolitan Ice and Coal Dealers' Union, through one of their organizers, prevented competition by apportioning territory to dealers.

Investments of the small dealer were limited, it was shown, to the purchase of territory, apartment houses costing from \$500 to \$2,000, according to size. Payment of dues to the union protected this investment.

Organizers also urged the dealers to keep the price of ice up to 60 cents per hundred pounds.

(Continued on Page 8, Column 2)

DISTRIBUTOR-DEALER LIST OF G. E. COMPANY GROWING RAPIDLY

Many Large Electrical Jobbers,
Dealers and Utilities
Secure Franchise

The Electric Refrigeration Department of the General Electric Company, Cleveland, O., announces the following additions to their list of distributor-dealers:

Ahren's Supply Co., 521 N. Broadway, Oklahoma City, Okla.

American Electric Co., 118 North 4th St., St. Joseph, Mo.

Arnold-Ervin Co., 210 W. 3rd St., Davenport, Ia.

Alexander-Seewald Co., 102 W. Peachtree St., Atlanta, Ga.

The American Light Co., Zanesville, Ohio, 128 Main St.

Automatic Appliance Co., 2080 Broadway, Oakland, Calif.

Geo. W. Bach Co., Inc., 408 Sixth St., Sioux City, Ia.

Battle Creek Maytag Co., 17 S. Jackson St., Battle Creek, Mich.

Geo. W. Belsey Co., 2308 W. 7th St., Los Angeles, Calif.

E. W. Berry, Ranger, Tex.

Birmingham Electric Co., 1200 Sixth Ave. N., Birmingham, Ala.

The H. G. Bogart Co., 132 So. Howard St., Akron, Ohio.

Chas. Brown & Sons, 871 Market St., San Francisco, Calif.

Judson C. Burns Co., Inc., 1101 Chestnut St., Philadelphia, Pa.

Bard-Barger Co., 118 E. Broad St., Columbus, Ohio.

Geo. T. Bauder, 1225 4th St., San Diego, Calif.

L. H. Bennett, 2112 Broadway, Oakland, Calif.

Benton Harbor - St. Joe Ry. & Lt. Co., 256 W. Main St., Benton Harbor, Mich.

C. E. Blackwell & Co., Inc., Okanogan, Wash.

Ray H. Boaz Co., Inc., 633 Monroe at Marshall, Memphis, Tenn.

F. S. Bulpitt & Sons, Taylorville, Ill.

P. F. Casey, 499 Central Ave., Dover, N. H.

Rex Cole, 7 E. 45th St., New York.

R. Cooper, Jr., 824 Tower Court, Chicago, Ill.

Correll Refrigeration Co., 502 Terminal Warehouse, Cincinnati, Ohio.

Corsicana Power & Light Co., Corsicana, Tex.

Cushman Refrigeration Co., 1907 E. 13th St., Cleveland, Ohio.

E. O. Cone, El Paso, Tex.

Corpening & Kasnick, 421 N. Tryon St., Charlotte, N. C.

W. H. Corrin, 2 Main St., Oil City, Pa.

Crandall Electric & Supply Co., 232 Cortland St., Jackson, Mich.

F. B. Connelly Co., 423 N. Broadway, Billings, Mon.

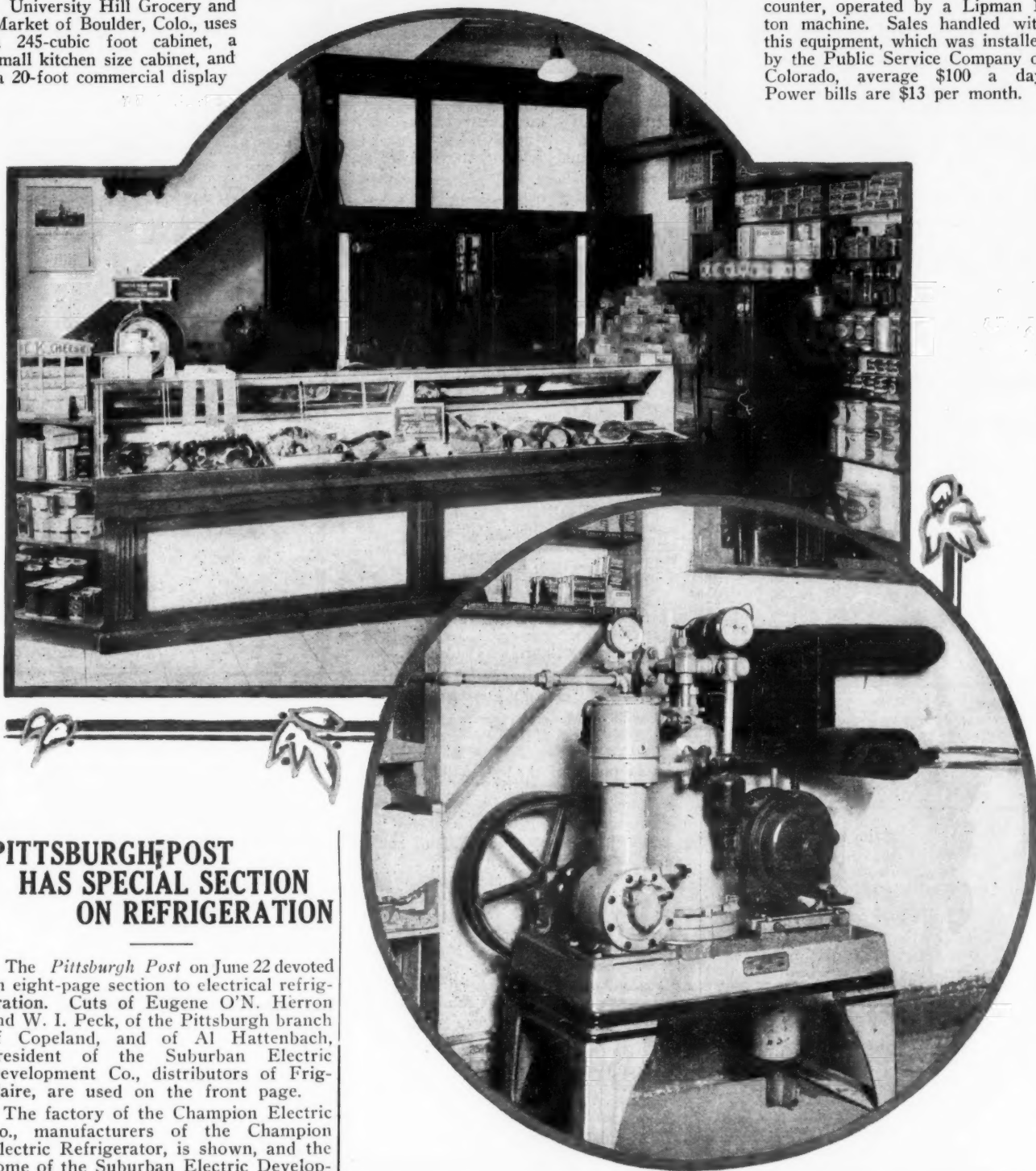
Coghlin Electric Co., 30 Exchange St., Worcester, Mass.

(Continued on Page 6, Column 2)

Power Bill Only \$13 per Month to Refrigerate Two Cabinets and a Display Case in This Colorado Grocery

University Hill Grocery and Market of Boulder, Colo., uses a 245-cubic foot cabinet, a small kitchen size cabinet, and a 20-foot commercial display

counter, operated by a Lipman 1-ton machine. Sales handled with this equipment, which was installed by the Public Service Company of Colorado, average \$100 a day. Power bills are \$13 per month.



PITTSBURGH POST HAS SPECIAL SECTION ON REFRIGERATION

The *Pittsburgh Post* on June 22 devoted an eight-page section to electrical refrigeration. Cuts of Eugene O'N. Herron and W. I. Peck, of the Pittsburgh branch of Copeland, and of Al Hattenbach, president of the Suburban Electric Development Co., distributors of Frigidaire, are used on the front page.

The factory of the Champion Electric Co., manufacturers of the Champion Electric Refrigerator, is shown, and the home of the Suburban Electric Development Co. is pictured. The new General Electric Refrigerator is illustrated also on the first page of the section, which uses general articles on electric refrigeration, as well as some based upon special electric refrigeration machines.

A center spread of advertising features the Copeland, with forty-four local dealers in nearby towns each given an individual card, under the caption "Buy from your local dealer—He is listed below." Frigidaire uses a somewhat similar plan on the last page of the section, advertising not only for Pittsburgh dealers but for seventeen in nearby towns.

Advertising space is used by many other Pittsburgh distributors of nationally advertised electric refrigerators with some space given to local dealers in the Pittsburgh region.

COMMITTEE OUTLINES STANDARDIZATION PLAN

The committee on standardization of parts of household electric refrigerators, of which Roger K. Braun, sales service manager of Kelvinator, is chairman, has been partially organized by Mr. Braun.

The committee will study (1) a test code for domestic refrigerating machines, (2) a test code for refrigeration, (3) standardization of refrigerator sizes (also the simplification of sizes), (4) nomenclature, (5) motor bases, (6) parts such as tubing unions, tubing nuts, flanges, etc., (7) location of cooling unit hanger bolts in refrigerators, (8) location of tubing hole, (9) cooling unit, (10) oil, and (11) refrigerant.

STATE ENGINEER USES ELECTRIC REFRIGERATOR TO TEST MATERIALS

Shimmons Bros., Lawrence, Kan., have installed two boxes on one compressor in the office of the state sanitary engineer. One is operated at zero and is used for testing rock, brick, cement work, etc. The other is operated at 45 degrees and is used for testing water from all parts of Kansas.

ELECTRICAL ASSOCIATIONS NOW REPRESENTED ON S.E.D. BOARD OF DIRECTORS Reorganization Meeting Held in Atlantic City—Committee to Consider Future Plans

The reconstituted board of directors of The Society for Electrical Development held its first meeting under the reorganization plan on June 6, during the N. E. L. A. Convention at Atlantic City.

At this meeting the new directors took office, including the president, managing director, and chairman, Commercial National Section, of the National Electric Light Association, and the corresponding officers of the National Electrical Manufacturers' Association, Electrical Supply Jobbers' Association and Association of Electrotechnists, International, and the chairman of the League Council. Howard T. Sands, President-elect of the N. E. L. A., was appointed a director to succeed R. F. Pack.

At the meeting a special committee was appointed to give consideration to and to report to the Board of Directors, on the matters of future activities, functions and official and staff personnel.

The committee members are: Howard T. Sands, president of the N. E. L. A., chairman; Gerard Swope, president of the N. E. M. A.; George E. Cullinan, chairman of the executive committee of the E. S. J. A.; James R. Strong, representing the president of the A. E. I.; J. E. North, chairman of the League Council, and Earl Whitehorse, at large.

Commends June 8 Issue

"We think you should be complimented upon your issue of June 8th, and like the picture of our booth very much."—H. W. Foulds, assistant to the president, Servel Corp., New York.

Leading manufacturers trim their refrigerators with

Monel metal
The International Nickel Co. (Inc.), 67 Wall St., New York City

DENVER UTILITY USES MOTION PICTURES TO SELL REFRIGERATION

During this summer the Public Service Company of Colorado plans to run motion pictures in sixteen Denver theatres, in an effort to increase sales of electric refrigerators.

Motion picture advertising is not new to the Denver office of this company, which has used it successfully with other electrical appliances. Action that gets attention has been found to be one of its chief advantages, according to J. M. Eakins, who is in charge of sales.

The films to be used this summer are "custom" made, that is to say, they have been prepared especially for the Public Service Company of Colorado. They will be shown in four theaters simultaneously, for a week at a time. Films will be shown every fourth week at a given theater, in order that the plan be not overdone.

DETROIT A. S. R. E. VISITS PLANT OF ELECTRIC REFRIGERATION CORP.

Members of the Detroit Section, American Society of Refrigerating Engineers, were the guests of the Electric Refrigeration Corporation at a dinner, served in the plant cafeteria, June 22. A tour of the new factory of the corporation preceded the dinner.

The early part of the afternoon was spent in visiting a cold storage plant of the Great Lakes Terminal, and in inspecting the plant of the Consumers Ice Cream Company.

ELECTRICAL SHOW IN NEW YORK OCT. 12-22

The Twentieth Annual Electrical Show will be held in Grand Central Palace, New York City, October 12-22.

Sixteen different companies, representing the electric refrigeration industry, occupied thirty-three booths at last year's show. There were a total of 150 exhibitors in 1926, with 170,000 visitors attending during its ten-day run.

ELECTRIC AND GAS REFRIGERATION ON JOINT PROGRAM

Michigan Gas and Electric Associations Discuss Developments in Both Industries

The combined conventions of the Michigan Gas Association and the Michigan Electric Light Association are being held July 5 to 7 at Mackinac Island.

Alex Dow, president, the Detroit Edison Company; Prof. Alfred H. White, dean of chemical engineering, University of Michigan; A. C. Marshall, Detroit, chairman, Michigan committee on public utility information, and Miss May S. Fletmeyer, Hammond, Ind., will address the joint session of the two associations July 5.

C. W. Tippy, Jackson, vice-president and general manager of Consumers Power Company, will be toastmaster at the annual banquet Wednesday evening, July 6, and E. C. Hodges, New York, will deliver the principal address of the evening.

Recent developments in the two industries will occupy the attention of the delegates. The convention of the electric light association will be featured by discussions of the problems encountered and progress made in the application of electricity to farming in Michigan. High points of the gas sessions include an address on the use of the gas flame to energize a new type of automatic domestic refrigerator.

The electric light association program includes: President's address, by D. E. Byerley, Adrian; "Radio Interference," by A. B. Buchanan, Detroit; "Training Employees in the Interest of Public Relations," by John K. Swanson, Saginaw;

(Continued on Page 6, Column 1)

THOSE WHO RENDER PROPER SERVICE ARE BOUND TO SUCCEED

Reward Awaiting Those Men Who Apply Themselves in Field of Electric Refrigeration

By C. K. Woodbridge, President,
Electric Refrigeration Corporation,
Detroit, Mich.

Your courteous greetings and the splendid comments on the electric refrigeration industry noted in your columns prompts this brief viewpoint on the business.

Any industry which has only three per cent saturation of its potential market offers unquestioned possibilities for the future if it makes a product that benefits the public. This is one of the primary reasons why this industry is attractive. There are millions of homes and commercial institutions which have yet to know the satisfaction and economy of electric refrigeration. Since electric refrigeration has been proven dependable and is a product people want when they know about it, the selling process commands one's intense interest.

The organizations that render proper service are bound to succeed if they follow the proper sales and merchandising plan.

The electrical industry as a whole has in our opinion been a good user of advertising. Advertising has played its part in the introduction of electrical refrigeration. I am quite confident that in a few years the International Advertising Association can point to the results accomplished by the advertising of electrical refrigeration as another indication that truth in advertising pays.

A third, and possibly most important reason for great interest in this business, is the splendid service it renders to humanity. Good electric refrigeration is more dependable than any other method. The saving in time, effort and labor is a great contribution to the welfare of the human race. A business which contributes these essentials to civilization cannot help but succeed if it is conducted along the right lines. This motive is one of the chief reasons for our success in interesting good business men in electric refrigeration. It will mean a priceless reward awaiting those men who apply themselves diligently in this line of endeavor.

Tubing in 100ft. lengths

Smooth. No possibility of scale. Up to 100 foot lengths. Formed to your order. 1431 Central Ave., Detroit, Mich.

WOLVERINE
SEAMLESS COPPER AND BRASS TUBING

An Outstanding Sales Feature
for REFRIGERATORS

AIRTITE
CUSHION
GASKET

Developing Man Power in the Sale of Electric Refrigeration*

Comprehensive Training Plan Developed
By Southern Central Station

By William E. Clement, Commercial Manager,
New Orleans Public Service, Inc.
New Orleans, La.

The new set-up in the Refrigeration Division of New Orleans Public Service, Inc., not only provides for careful selection of men, but lays down a thorough training course, at the expense of the company, wherein men are now properly schooled for this important work.

Under the heading "Foreword," there is given also a resume of the instructions to salesmen, which not only governs commissions allowed and required quota of sales, but outlines the company's policy in regard to handling refrigeration sales, together with specific instructions as to number of daily interviews, handling of prospects, floor days, etc.

Under this new plan, which in a way takes a leaf out of the book of the adding machine man, automobile, and other high class specialties, salesmen are employed, trained, and put on the selling force only after they have been carefully selected and found to measure up to qualifications for salesmen as covered in this paper. These picked men are then put through a course of four weeks in the Refrigeration Service and Installation Department, after which they are given two to four weeks sales training along with the regular refrigeration men, under direction of the sales manager.

Under such a set-up, it will readily be seen that before investing time and money in these men, we select and study them with most painstaking care, instead of as under the former "hit and miss" system, placing men on this work who later have been found unable to qualify. In the past this condition, we believe, has largely been responsible for our heavy turnover in salesmen, lost motion, and failure to get commensurate results.

This new working arrangement, of course, is not expected to present the last word in the creation of "Refrigeration Salesmen"; however, it has been developed with great care and attention to detail, and we believe that some such plan will obviate much of the discouragement to salesmen (due to lack of proper preparation), and will ultimately be adopted by most of the companies operating refrigeration divisions.

The detail as to our set-up with relation to salesmen and their duties, is covered under the heading "Foreword," and a copy of this pronouncement is handed to each salesman as he enters upon his duties.

Foreword

In applying for a position with the New Orleans Public Service, Inc., it is understood that you are willing to subject yourself to all rules and regulations then in effect, or to all rules and regulations as they may be amended from time to time, and that it shall be your ambition to co-operate in every way possible with your fellow workers in order that working conditions be pleasant and mutually profitable to your company and yourself. Individual effort will be responsible for a great deal, but co-operative effort or team-work is the final answer to any success that may be attained in this or any other line of endeavor.

Keep in mind always the fact that our standing with the public we serve will measure our success or the lack of it. So

*Presented before the Commercial Section, Southwestern Geographic Division, N. E. L. A., and Southwestern Public Service Association, at NEW ORLEANS, LA., April 26-27, 1927.

We Should Train Salesmen and Concentrate on Doing This Job Without Delay

I am of the opinion that the most important thing for the central stations to do at present is to train salesmen and concentrate on doing this "refrigeration electrification" job in a creditable manner and with as little delay as possible. As Mr. Bennett remarked at the recent Commercial Section meeting of the N. E. L. A. convention, the electric refrigerator is the only article which we can sell a customer and then be absolutely sure that our estimates on increased revenue will be borne out, and feeling as we do about this development here in New Orleans (the South, of course, being the real stronghold for refrigeration), we have during the past six months been putting our best foot forward to create that "customer acceptance" which is so very important and which has heretofore not been given proper attention here in our section.

—William E. Clement.

Sales and Service

The Refrigeration Division of the Commercial Department shall be divided into three sections or groups, to be designated as follows:

1. The COMMERCIAL DIVISION will be supervised by a competent refrigeration engineer, to be known as assistant to the manager of this division, and who will have general supervision over and be directly responsible for all commercial and quantity sales, also service and installation.

2. The DOMESTIC DIVISION will be supervised by a salesman of proven ability, who will be known as domestic sales supervisor, and will be responsible for the training of salesmen and the general sales effort of this group.

3. The SERVICE AND INSTALLATION DIVISION will be supervised by a competent practical refrigeration engineer, who will be responsible to the manager of the Refrigeration Department for all things pertaining to the efficient installation and servicing of all types of refrigeration machines.

Sales Policy

It is the policy of your company to conduct all sales activities in a most ethical manner, and all destructive criticism of

competing lines of merchandise, whether locally represented or not, is positively forbidden. Of course, it is understood that situations will present themselves where comparison must necessarily be made. In this case we insist that great care be exercised in making a legitimate comparison and that competing merchandise be recognized immediately as good merchandise, and that comparison be made on salient features of the two lines in question.

Compensation

I—COMMERCIAL

Salary \$80.00 per month.

Commission—

1 to 5 compressors per mo.....10%
6 to 10 compressors per mo.....11%
11 to 15 compressors per mo.....12%
16 or more compressors per mo.....13%

Bonus—\$150.00 per month to salesmen earning maximum commission. Quantity sales do not apply on the above schedule.

II—DOMESTIC

Salary \$60.00 per month.

Commission—

1 to 5 compressors per mo.....10%
6 to 10 compressors per mo.....11%
11 to 15 compressors per mo.....12%
16 or more compressors per mo.....13%

Bonus—\$100.00 per month to salesmen earning maximum commission. Quantity sales do not apply on the above schedule.

III—MINIMUM INDIVIDUAL QUOTA OF SALES PER MONTH

1st month.....1 compressor
2nd month.....2 compressors
3rd month.....3 compressors
4th month.....5 compressors

IV—QUANTITY BUSINESS

Five or more compressors will be considered quantity business, and all quantity sales will be handled exclusively by the Commercial Division. The following schedule of commissions will be paid on this class of business:

5 to 10 compressors.....7½%
11 to 20 compressors.....5%
21 to 30 compressors.....4%
31 or more compressors.....3%

Salesmen

REPORTING FOR WORK—Promptly at 8:30 A. M.

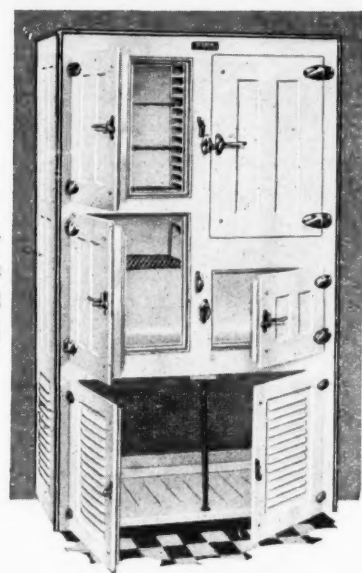
SALES MEETING—Each morning from 8:30 A. M. to 9:00 A. M. Leave for the field not later than 9:15 A. M.

SALES EQUIPMENT—Each salesman will be furnished adequate and up-to-date sales equipment consisting of brief case, scrap book, demonstration album, rule or tape measure, and a minimum of fifty (50) pieces of current descriptive literature.

INTERVIEWS—A minimum of ten (10) interviews daily to be reported on forms provided (this does not mean ten (10) calls, but ten (10) interviews). Reports to be turned in between 4:45 and 5:00 P. M.

(Continued on Page 4, Column 3)

BOHN SYPHON REFRIGERATORS



Beautiful, Distinctive. Can be had in 7, 9 and 12 cubic foot net food storage capacity.

White Porcelain Enamel inside and outside. The machine compartment is ideal for storage space where remote installation is made.

For Electric Refrigeration

Write for Full Particulars

Bohn Refrigerator Company

SAINT PAUL, MINNESOTA

These Models are on Display at our own Stores in

NEW YORK
5 E. 46th St.

CHICAGO
227 No. Michigan Blvd.

BOSTON
707-709 Boylston St.

Novoid Corkboard Leads

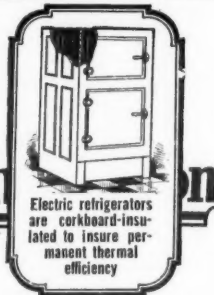
At the head of the list of insulating materials stands Novoid Corkboard. It is high in insulating value, uniform in quality, and economical to use. It comes in 12" x 36" and 24" x 36" sheets, in 1", 1½", 2", 3" and 4" thicknesses. Write for samples and Bulletin 271-E.

Novoid Corkboard Insulation

CORK IMPORT CORPORATION
345 W. 40TH ST. NEW YORK

"Permanent Protection for All Refrigeration"

ATLANTA BOSTON BUFFALO CHICAGO PHILADELPHIA ST. LOUIS



A new IROQUOIS

QUIET—as ever!



61" high
22½" deep
26¼" wide

Just think of it! This new quiet Iroquois has 9½ square feet of shelf space—5½ cubic feet of food storage capacity—and makes 110 ice cubes, or more than 9 lbs. of ice! In addition, there's a special tray to store ice cubes.

NEVER before has it been possible to get an electric refrigerator so compact and yet so roomy. This new Iroquois has more shelf space and more food storage capacity than is usual for an apartment type; and greater ice-cube capacity than any other refrigerator of its size.

To see this new quiet Iroquois with its beautiful all-metal cabinet, white enamel inside and outside, is to want it for your kitchen. A handsome piece of furniture, and one of the most efficient of household conveniences.

The quiet Iroquois keeps your food fresh and wholesome the year around—and crisp, tasty salads, sherbets and other dainties are so easily prepared in the Iroquois. Simple in construction—requires a minimum of servicing. Economical to operate.

Backed by the resources of a \$40,000,000 corporation. A product of The Iroquois Electric Refrigeration Company, associate of The Barber Asphalt Company engaged in world-wide business for a half-century.

The quiet Iroquois line comprises eight other models—white or gray porcelain enamel cabinets. There is also a quiet Iroquois electric refrigerating unit for installation in your present ice box.

IROQUOIS

The QUIET Electric REFRIGERATION
produces the crisp, dry cold of a frosty night

Distributors: In a few years the electric refrigeration industry will prove to be one of the major industries of the country. To those who can qualify, an exclusive distributor arrangement for selling Iroquois Electric Refrigeration should prove profitable. Now is the time. Write us for complete details.

Kleen Kold Refrigerators For Mechanical Refrigeration



Insulated with 2 inches of cork.

Lacquer finish in White or Gray.

White Porcelain or Enamel Interiors.

Several standard stock sizes, permitting quantity production and attractive prices.

Also prepared to build special sizes in large quantities.

HARDER REFRIGERATOR CORPORATION
COBLESKILL, NEW YORK

What the Dealer Needs to Succeed

A Review of the Requirements for Satisfactory Relations Between Manufacturer and Dealer

"What are the needs of the dealer in order to assure him of the greatest possible success?"

In answering this question, C. U. Carpenter, general manager of the Frigorator Division and vice-president of the General Necessities Corporation, gives as his opinion the following ten helps that the dealer should have:

"He should be provided with a line that covers the entire market possibilities—household, apartment house, water coolers, ice cream cabinets, and commercial, which includes electric refrigeration equipment for all types of display cases and coolers in groceries, butcher shops, florist shops, delicatessens and restaurants.

He should be supplied with a unit that is thoroughly reliable and gives a minimum of service trouble.

He should be entitled to the best discount that is possible under present trade and manufacturing conditions.

His deliveries should be reasonably prompt.

The manufacturing company should always be ready to assist him in the case of trouble and he should always feel the assurance of prompt help.

Particular attention should be paid to giving prompt consideration to his complaints. This is more important than appears on the surface, for neglect of this leads to a dissatisfied state of mind on the part of the dealer that adversely affects his selling ability. He should feel that the factory is giving him really sympathetic assistance.

Special attention should be paid to the training of his service man. Great mistakes are often made by allowing the dealer to select for his service man some relative who is not a mechanic. This

always leads to incompetence in this vital part of the business and shortly heads Mr. Dealer into trouble.

It is always of particular importance that his salesmen be thoroughly grounded in the principles of electric refrigeration and that they be taught the best and most modern way of presenting the arguments in its favor. This highly important point is often neglected, with the result that all the other efforts to secure the dealer and get business from him are wasted through poor selling results due to ignorance.

The dealer should be supplied with descriptive sales manuals covering each line.

A regular method of visiting dealers should be developed. There is need of real engineers for this purpose instead of the out-and-out salesman who often does not possess sufficient knowledge to benefit the dealer. A sales engineer, who combines with his technical knowledge of electric refrigeration as applied to each of the lines mentioned, some degree of selling ability, will prove to be the keynote of dealer development, for through him the dealer and his organization will learn the fundamentals which are so necessary in order to get the best sales results out of a territory.

turn downs a day. The anticipated isn't disheartening.

5. Leave the way open for a repeat call.

6. If the woman of the house must talk to her husband, be on hand for that talk. It will be two against one, as well as experience against vagueness.

7. Feature the higher priced models first. It is easier to work down than up.

DEATH OF CHARLES DRAKE GREAT LOSS TO A.S.R.E.

New York Section Cancels Meetings as Mark of Respect to Society Treasurer

Charles T. Drake, superintendent of construction of the Carbondale Machine Company, with headquarters in New York City, died suddenly Sunday evening, June 5, at his home, 8826 183rd Street, Hollis, Long Island, N. Y.

Mr. Drake, who was 43 years old, entered the employ of the Carbondale Machine Company in 1903 and has been in their employ in various capacities ever since. He was of a studious disposition and energetic in the performance of all duties entrusted to him.

Mr. Drake was deeply interested in association work and for the past several years has been treasurer of the American Society of Refrigerating Engineers. He was held in the highest esteem by his associates and his death is felt as a severe blow to his many friends in the refrigerating engineering profession. As a tribute to his memory President Bennis and the council of the New York Section of the American Society of Refrigerating Engineers cancelled the proposed June meeting of the section.

Mr. Drake leaves a wife and five children.

The funeral was held from his late residence June 9 and was largely attended.

Milwaukee Central Station Decides to Go After Business In Earnest—Sells 900

How the Milwaukee Electric Railway and Light Company installed nearly 900 electric refrigerators between last October, when it took hold of the problem in earnest after selling only 100 up to that time in 1926, and the first of May, is told in the June issue of *Electrical Merchandising*.

Though volume has been achieved in a short time, it was not the main objective of the company. Its aim was to give its customers a service that is entirely satisfactory, based on the feeling that this is the first obligation of the central station. That is why it moved its appliance selling department, placing it under the jurisdiction of the sales manager; why it brought in an experienced refrigeration man and crew manager, who organized a special resale crew of high calibre men; and why it gave the crew manager emphatic instructions to turn down every installation where the customer insisted on buying an undersized box or unit.

Of the 900 installations mentioned above 474 have been multiple-unit jobs. Fifty per cent of the single-residence sales have required that the motor-compressor unit be located in the basement.

Thoroughly trained installation and service experts have worked with the selling organization. Ten men are kept busy on the multiple-unit installations, while two men specialize on service maintenance.

The golden rule of the company is

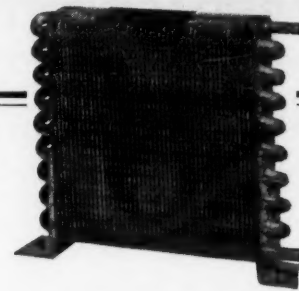
initial care, it being one of the most telling arguments of the salesmen. Men who install for the Milwaukee Electric Railway & Light Company are instructed to take a day, if necessary, on a single-unit remote control job, according to C. M. Berry, service manager. The cost of such careful installation is slightly higher, but the company is convinced that such care pays. A check-up inspection follows the second day after the installation, and by this future service calls are cut materially.

An outside selling force of nine men, under the direction of N. C. Christopherson, assistant sales manager, has given this central station its flying start this year. Each salesman has a closed territory four miles square in one of the better residence sections, with the privilege of finding additional business in the two-thirds of the city that is kept as open territory.

Successful Methods

Sales principles that have contributed to the success of salesmen for the Milwaukee Electric Railway & Light Company in marketing electric refrigerators are:

1. Sell the boss on yourself first; otherwise you will be a half-hearted salesman.
2. Attend the ten-minute experience meeting every morning.
3. Call at the back door—it is thirty feet nearer the refrigerator, and chances are twice as good to obtain entrance if you can see the old box and refer to it.
4. Expect to receive five complete



Flintlock Condensers Are Uniformly Efficient

Because: The fin is an integral part of the Tube

Our Booklet Tells the Story
Write for It

FLINTLOCK CORPORATION

4461 Jefferson Avenue
Detroit, Michigan

PIPE and TUBE FITTINGS



Made From Brass Rod, Castings or Forgings

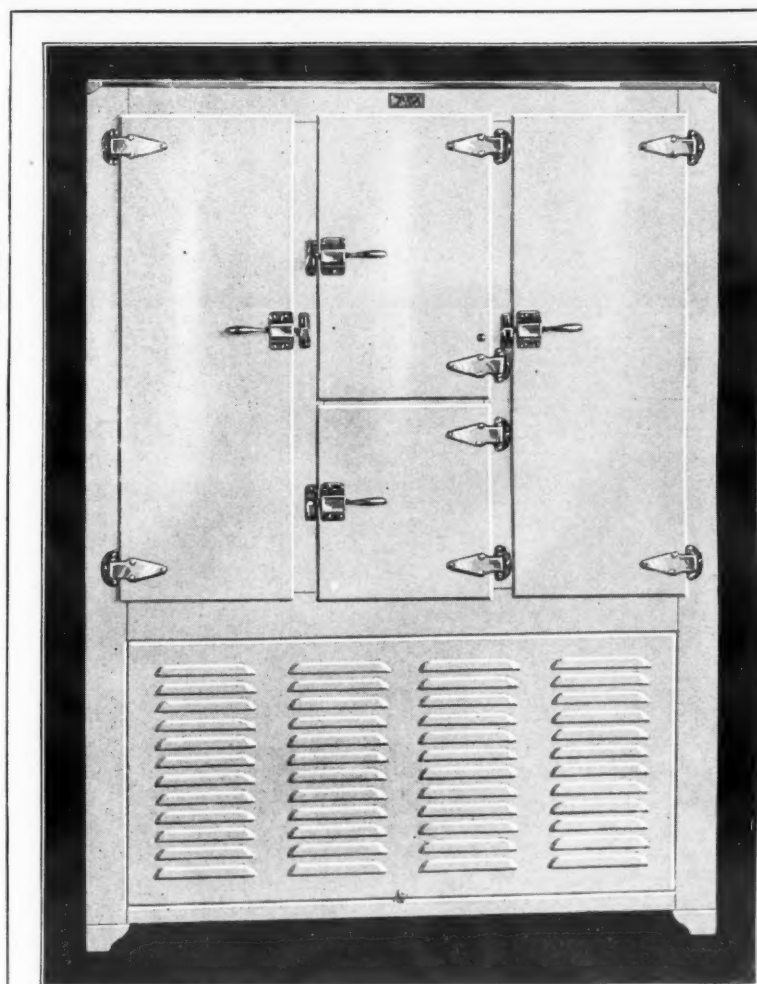
For many years we have specialized in the manufacture of brass fittings, in small sizes, for connecting brass and copper tubing.

In addition to fittings made from brass rod and castings, we are now producing similar parts made from BRASS FORGINGS to meet the requirements of Iceless Refrigerator Manufacturers for fittings of a superior type. These fittings will not leak gas, air or liquids under mechanical pressure. They have the compact grain structure, high tensile strength and smooth, flawless surfaces found only in forgings. Our forged fittings are accurately machined, carefully inspected and equal to the most exacting requirements.

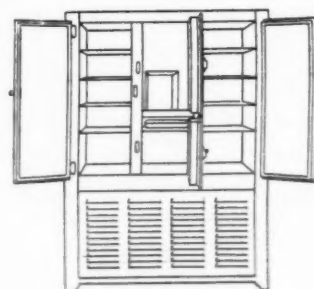
Send a sample or blue-print for quotations on parts of a special nature. Catalogue No. R-30, showing our complete line of standard fittings will be mailed on request.



COMMONWEALTH BRASS CORPORATION
DETROIT 5781-5835 COMMONWEALTH AVE. MICH.



The REXFIELD Model



The new Rex metal cabinet for electrical refrigeration excels in all phases of design and construction, because it is the product of highly skilled craftsmen, specializing in the manufacture of fine metal cabinets, exclusively.

REX

REX MANUFACTURING CO.
CONNERVILLE, IND. U.S.A.

FINE METAL CABINETS FOR ELECTRICAL REFRIGERATION

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Electric Refrigeration Industry

PUBLISHED EVERY TWO WEEKS BY

BUSINESS NEWS PUBLISHING CO.

554 Macabees Building, Woodward Avenue and Putnam Street
Detroit, Michigan. Telephone: Northway 4243-4244

Subscription price: \$1.00 per year; three years for \$2.00
Foreign Countries: \$1.50 per year. Advertising Rates on Request

F. M. COCKRELL, Editor and Publisher H. A. DELASHMUTT, Advertising Manager
HELEN JO SCOTT, Assistant Editor BEULAH WERTZ, Circulation Manager

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JULY 6, 1927

"Canned Sales Talk"

Experienced salesmen of the old school, with implicit confidence in their ability to "size up their prospect" and adapt their selling method to each individual, profess little respect for the modern specialty salesman who memorizes a talk prepared for him and who carries a book which gives him a cut-and-dried answer to every possible question which may be asked by the prospect.

Sales executives differ in their opinions regarding the merits of so-called "canned sales talk." Sales managers who are themselves master salesmen are inclined to put their confidence in men with a natural glibness and versatility. They look for men who "know how to sell." It is undeniable that there are such men, quick of wit and tongue, who can readily adapt themselves to any situation, or to any type of prospect, with comparative ease.

Sales managers frequently indulge in a persistent hope of some day collecting a crew of go-getters who do not need to be told how to sell—who already know what to do and how to do it. In the average situation such hopes are in vain.

Those companies which have made the greatest success of specialty selling have invariably found it necessary to develop their selling plan first and then develop men who can operate the plan. A number of outstanding companies have demonstrated that it is entirely possible to develop a selling method so thoroughly that even mediocre talent may be trained to operate it successfully. In fact, such companies are sometimes accused of employing nothing but mediocre men—men who are so lacking in gumption that they are willing to do exactly what they are told. The other side of the story, however, is that a notable number of high pressure salesmen, with an enviable earning capacity, are produced by this kind of training.

Regardless of the general aspects of the argument, the real question is the adaptability of the prepared sales talk to the selling of electric refrigerators to the housewife. There are two phases of this particular problem which have an important bearing upon the subject:

First, there is the necessity for a considerable amount of educational work due to the comparative newness of electric refrigeration as a service in the home.

Second, the price of the product necessarily demands a considerable number of contacts for each sale closed.

With reference to the educational job which must be done in every community in order to bring about a proper appreciation of electric refrigeration, this situation represents a definite opportunity for the use of a well-prepared sales talk. There is an obvious advantage in having every salesman "get over" the fundamental facts about electric refrigeration to every housewife in the community. If the salesman can be trained to tell the story interestingly and correctly in the shortest space of time, his own efficiency will be increased and the tendency for him to scatter his efforts and indulge in needless controversial arguments will be avoided. When the salesman sets out to get over a definite message to the largest number of people each working day the results of his effort are almost sure to be satisfactory.

Any household appliance which cannot be purchased "out of pocket" and which must usually be bought on time payments, calls for careful consideration by the average family. The salesman cannot hope to sell every prospect he visits no matter how meritorious his product or how much ability he has as a salesman. The salesman who is properly trained and who works his territory consistently soon finds that there is a certain rather fixed ratio between the number of his sales and the number of his calls. The salesman who determines this ratio to his satisfaction finds it a wonderful stimulant to continued high-pressure effort. He becomes confident of his ability to sell, say, one out of every ten. He is not in the least disheartened by the nine who fail to buy. He approaches the tenth with the same enthusiasm and hopefulness that marked his attitude towards the first prospect. He knows that if he sees enough people and tells his story properly he will raise his ratio to one out of every eight, or six, or four. He constantly strives to multiply his contacts and improve the technique of his presentation. Once a salesman becomes fully convinced of this percentage factor, he is unbeatable.

It is true, of course, that an intelligent and persistent salesman may finally work out the most effective presentation for himself. But the fact remains that most of the young men who enter this type of work, either seeking experience or a means of livelihood, become completely discouraged before they learn the secret of success. The loss in time and human effort is too great, not to mention the affect upon the community which may result from the efforts of untrained and discouraged salesmen.

All experience points to the imperative need for organized sales training. In most cases the manufacturer must provide the material and point the way, if he does not actually set up sales schools and furnish teachers to do the job of training on the ground. The prepared sales talk has a legitimate place in the training program and its advantages should not be overlooked. It must, however, be based on actual and successful experience in the field.

DEVELOPING MAN POWER IN ELECTRIC REFRIGERATION

(Continued from Page 2, Column 3)

PROSPECTS—Each salesman will be allowed thirty (30) days' protection on a preferred prospect list of twenty-six (26) names. These prospect cards will be turned into the office in triplicate, all duplications will be returned to the salesman the following evening, and after checking, if the prospect is found to be legitimate and bona fide, one (1) copy of the card will be filed in the regular prospect file in the office, and will be suitably tagged, so that at a glance it can be determined the kind of equipment the prospect is interested in and probably will purchase. Each card will carry a return call date, and will be brought up and returned to the salesman on the day preceding the return call date. If this card is not returned to the office within the succeeding three (3) days, protection on this prospect will automatically cease. To insure that all names on which protection is afforded being prospects who can be sold during the current month, the salesman will be afforded the privilege of making such changes or substitutions as he desires. This, however, will be governed by the rule covering the filing of original prospects for protection.

To promote friendly co-operation between salesman, and to insure that all return calls are made promptly and appointments kept, any salesman bringing in an order on which another has protection will be paid \$5.00 of the commission earned on that particular order.

COMMERCIAL SALES—All sales to grocers, butchers, florists, hotels, restaurants, drug stores and water cooling for industrial plants and offices, together with quantity sales of five (5) or more jobs in apartment houses or flats, will come under this heading.

DOMESTIC SALES—All residential customers up to and including four (4) units come under this heading.

EXCHANGE OF LEADS—In order that each sales group confines their efforts to the particular class of work they are selected to do, it will not be permissible for the domestic group to take orders for commercial installations, or the commercial group to take orders for domestic installations, but it will be the specific duty of salesmen in either group to obtain leads when possible for the other group, and for which the commercial salesman will pay out of commissions earned the sum of \$10.00 for leads furnished by the household group which terminate in sales. Salesmen in the domestic group will in turn pay the commercial salesmen the sum of \$7.50 out of commissions earned for leads terminating in sales.

LEADS TO SALESMEN—Salesmen to be given leads that come into office in rotation.

FLOOR DAY—In order to afford the sales department every possible advantage, a roster of all salesmen will be set up alphabetically or otherwise, and each salesman will be permitted a floor day in his turn. Each salesman on his floor day will report to the sales room floor promptly at 8:30 each morning, and will be relieved for lunch by the salesman whose floor day follows, and if the salesman fails to report promptly or absents himself from the floor without permission, he will be penalized by the loss of his two (2) succeeding floor days.

PROMOTION—Domestic salesmen to be promoted to vacancies in Commercial Division, if competent.

Qualifications for Salesmen

Qualifications to be required of applicants for positions as salesmen (Refrigeration Department):

I. Education—High school or its equivalent. (This includes Trade School students or graduates.)

II. Personal Qualifications—Courteous, neat appearance, not over dressed or flashy, good conversationalist, and ability to sell himself (not over selling).

III. Mental Qualifications—Ambition, reliability, self-confidence, fairness (ability to deal fairly with competition), ability to co-operate, and need for supervision.

IV. Age—18 to 35 years.

V. Physical Qualifications—Must pass physician's examination; good health.

VI. Previous Experience—Previous selling experience desirable, but not necessary. Men handling such lines as high-class bonds, pianos and phonographs, furniture and insurance are desirable.

Selected individuals from other departments to be given preference. Such men shall be first trained as household machine salesmen.

Formal training in salesmanship in organized sales schools is desirable but not necessary.

VII. Method of Training—Applicants without selling experience shall receive four weeks' training in the service department, and two to four weeks' training in the household sales department.

Individuals with previous sales experience having the necessary personal qualifications and experience are to be placed in a four weeks' training course in the service department, and upon completion of which they will receive at least two weeks' training in salesmanship and will be assigned to the household division.

Salesmen from the commercial division are to be drawn from the household division.

It is desirable that men trained in the service department be promoted to salesmen whenever possible. The number of

Ottenheimer Says Poor Cabinet Sends Machine to the Scrap Heap



Reuben E. Ottenheimer
President, Ottenheimer Bros., Inc.,
Baltimore, Md.

A refrigerating machine extracts or absorbs heat. It does not make cold air. While most manufacturers of refrigerating machinery are recommending newer and more efficient cabinets, there are still some salesmen who promise excellent refrigeration in the old ice box, with its leaky walls and loose joints, by installing an electrical unit.

This kind of talk frequently gets the order, and when the coils and tanks are placed in the ice chamber they are so much colder than the ice was that it is possible to lower the temperature considerably, at the start.

But it is often mighty hard to keep the new owner sold on his purchase, because the machine has to run almost continuously, uniform temperature is impossible, and by and by even the little cubes of ice do not form. And above all, the machine itself is so overworked that it is forced to an early grave in the scrap heap.

men available from this source will be limited.

VIII. Salary while in training—Salesmen while in training to receive a salary of eighty dollars (\$80.00) per month.

Men drawn from other departments within the company not to suffer reduction in pay while in training.

Training Plan for Salesmen

Those to be trained will be divided into two classes, based on sales experience:

I—Men with previous sales experience—Those having previous sales experience are expected to complete the training course in household refrigeration at the Service Department within one month. This should be followed by a period of two weeks' training in salesmanship and policy. He will spend part of this time on the floor as an assistant to the regularly assigned floor man, and the balance of the time to be spent making calls on customers under the supervision of the head of the household division.

II—Applicants having no sales experience—The period of time to be spent in the service department will be the same as provided above. The training in policy and salesmanship will cover a period of four weeks.

The training in the Service Department shall cover the following points:

Routing of Salesman in Training

I. Warehouse and stockman (one week).

1. An explanation of principles of refrigeration,
2. Tear down and reassemble an air-cooled job,
3. Assist in assembling and repairing machines,
4. Assist in assembling refrigerator cabinets,
5. Repair cabinets,
6. Assist stockroom keeper.

II. Installation helper (two weeks).

1. Assist in installing following type jobs:

- a. Household (unit type),
- b. Household (basement remote),
- c. Grocery or butcher shop,
- d. Drug store, ice cream cabinet or soda fountain,
- e. Water cooling job,
- f. Duplex type job with same temperature and different temperatures,
- g. During this period made a study of factors affecting location of machine,
- h. The making of simple dimensioned sketches showing location of machine and lines to aid installation department in getting out material for job.

III. Service Helper (one week).

1. Record to be kept of service calls made by trainee and any important types of service not covered during this week to be demonstrated with actual machine.

IV. Sales training (one week).

1. One week on floor with regularly assigned floor man,

2. Trainee to be required to make a study or be given talks on the following subjects:

1. Reason for refrigeration,
2. Food temperatures for proper preservation,
3. Price of equipment,
4. Method of rating boxes and compressors,
5. Refrigeration operation with special reference to factors that affect cost of operation.
6. Applying rate schedule to calculating cost of operation.

V. In field with head of department on actual sales (one week).

1. Sales talks,

1. Obtaining prospects,
2. Methods of approach,
3. Methods of obtaining interest,
4. Follow up methods,
5. Closing or signing prospects.

As will be seen the above set-up has been carefully worked out and, while changes may, from time to time, become necessary, we feel that conditions cannot help but be immensely improved where such a plan is adhered to.

Refrigeration development has largely settled down to a selling problem, and judging from articles appearing in the electrical press, most of our companies are casting about for some plan which will develop "man power" and a high-class corps of expert salesmen who will make it possible for us to quickly bring the benefits of electrical engineering to our customers.

CENTRAL STATION MANAGER STRESSES SERVICE OFFER

There is a good demand for electric refrigerators in the smaller towns and cities, according to H. C. Hopkins, of Lawrence, Kan., manager of the Kansas Electric Power Company's salesroom at Lawrence. Service is stressed by Mr. Hopkins, who makes a point of seeing that each electric refrigerator sold operates to the entire satisfaction of the customer. A year's free service makes sales much easier than when service is unemphasized, he says.

HARTFORD COPELAND COMPANY TO BE DISTRIBUTORS

The Hartford Copeland Company, Hartford, Conn., has incorporated with an authorized capital of 600 shares of no par value stock, to engage in the distribution of Copeland electric refrigerators for domestic use. The organization starts business with \$2,000 paid in, and has the following incorporators: Hugh C. Pullen, 36 Auburn Street; Grove W. Loveland and Herbert B. Kingsbury, all of Hartford.

Small Electrical Items Bring Volume Customers to Department Store

Lipman, Wolfe & Co., Portland, Ore., have proved in practice that the small articles handled in an electrical appliance department have more business-building ability than the small profit which they carry would indicate. This store makes a point of emphasizing light bulbs, fuses, and other quick-moving merchandise, and in this way brings a large number of "volume customers" into the store.—Extracted from an article in the second June issue of the Retail Ledger, 1927.

Electrical Equipment for Produce Wholesaler

Electric refrigeration has been specified for the cold storage plant for the wholesale fruit and produce firm, L. Bernstein & Sons, of Bridgeport, Conn. Equipment will be furnished by Polley Refrigerating & Supply Co., South Norwalk, Conn., and installed by Lotz Asbestos Co., Hartford.

Wilson & Co., Stamford, Conn., wholesale meat dealers, will have an electric refrigeration system in their new \$75,000 storage building.

Each of the eighteen apartments in the new apartment house being built by S. G. Brewer, of Hartford, Conn., will be equipped with a Frigidaire.

Hopes Future Growth Will Equal Past

"I thoroughly enjoy every issue of the News and do not want to miss any one publication. Hoping that you grow as fast in the future as you have in the past."—H. A. Cheatham, Electric Refrigeration Department, General Electric Company, Cleveland, O.

To Manage Electrical Appliance Department

R. V. Fisher has taken the management of the electric appliance department of the St. Marys Electrical Supply Co., Inc., of St. Marys, Pa., which handles the Servel refrigerator.

Selling and Servicing Are 85 Percent of the Entire Job

Fundamental Problems in the Development of a New Industry

By F. B. Riley

There are many points of similarity between the launching of a refrigerator machine business and bringing it safely into the harbor of successful business ventures, and the launching of a modern ship and its safe return to port. Storms and shoals, hidden rocks, and other dangers may be encountered, but a captain who knows his job and can read the storm signals will finally get into port, providing his ship has been properly designed, engineered and built.

The opinion of the executives of some of our most successful machine manufacturers is, that on a basis of 100 points, selling and servicing are 85 points, with mechanism rated at only 15. Many concerns, now looking eagerly to this field for exploitation, reverse these figures and believe that with a mechanically perfect machine they have covered 85 per cent of the way.

Assuming that distribution and service are the important cogs in the refrigerating machine wheel, then it is a truism that the plans for successfully handling distribution should be based on an intimate knowledge of the conditions or factors underlying correct distribution. The factors are:

- 1.—Organization.
 - a. Finance.
 - b. Management.
 - c. Engineering and development.
 - d. Production.
 - e. Sales organization or service.
 - f. Relations with customers.
- 2.—Product.
 - a. Serviceability.
 - b. A luxury?
 - c. A convenience?
 - d. Must dealers be educated in its use?
 - e. Must consumers be educated in its use?
 - f. Cost—to make—to sell—to service.
 - g. Profit to manufacturer.
- 3.—Demand.
 - a. What affects it?
 - b. Who buys?
 - c. What volume sold today?
 - d. Is plan educational as against competition?
- 4.—Competition.
 - a. Who are they, and what type? (Wealthy, aggressive, lax.)
 - b. What are their marketing methods?
 - c. What advantages have they?
- 5.—Distribution.
 - a. Distributor—dealer organization.
 - b. Manufacturers' branches.
 - c. Tie-in with other appliance manufacturers.
 - d. Department store distribution.
 - e. Public service organization.
 - f. Trade discounts.
 - g. Service organization and policy.

The above outline will be discussed only in part in the following paragraphs.

ORGANIZATION—The problems of finance, management, production, etc., are contingent on the development of a successfully operating device. There can be no good excuse for designing and building anything but a successfully operating unit. There is no mystery about the principles or fundamentals of mechanical refrigeration. Failure, in its mechanical meaning, is merely an admission of incompetence in the engineering division.

A development and research engineer is a totally different type from a production engineer. Both types of mind are necessary in any well-balanced

organization, and their activities must be carefully harmonized if a successful production job is to be turned out.

Men who have previous experience in, and knowledge of, the refrigerating machine industry in its various ramifications can, without endless experimentation and expense, bring out a machine with production possibilities—one not handicapped by useless design variations that place it at a disadvantage with competing machines in cost of manufacture.

Fundamentals in design and production, building for the public as one builds for himself, proper financial backing, judicious merchandising counsel, and an intimate knowledge of merchandising methods bring success in a measure depending on the human element of management.

PRODUCT—Serviceability and all those other factors that come under this heading are either a result of the study of facts, or are inherent in the organization, and are the result of management methods. The cost to make, the cost to sell, and the profit must be based on a very definite program of production and on a merchandising plan carefully and faithfully carried out over a definite period of time. Profit will depend upon the accuracy of estimates. Any manufacturer of electrical refrigeration machines who expects to make a profit in the first year is looking at this industry through rose-tinted spectacles. There may be exceptions to this rule, depending upon the experience that is brought into the planning of the production and sales campaign.

Too many of the beginning manufacturers in this line look ahead at the leaders of the pack and make up their minds to overtake them within a six months period, not realizing that the leaders have been years in reaching their commanding positions. There is one consoling thought in looking ahead; any concern can buy any equipment that a competitor has, and in similar quantities, he can produce as economically. The only assets which a competitor has, and which cannot be duplicated quickly, are the sales and service organizations.

One organization brings a measure of success to the whole industry when it profits tremendously, and on the other hand, an organization cannot fail without putting some sort of quietus on the industry as a whole. Anything which tends to destroy confidence of the public in an industry is harmful.

The commercial machine, as an outlet for surplus production capacity, has little connection with the small machine industry. Sales and engineering activities, although they may be housed in the same building, should be entirely separate.

DEMAND—That there is a demand for electric refrigeration only in the summer, is far from the actual fact. A

selling campaign must be based on the assumption that there is need for refrigeration in the winter as well as in the summer. Machines do not sell themselves; purchasers do not run into stores and buy them off the counter. It costs more to sell a nameless machine than an advertised brand, so judicious advertising, based on adequate preparation, is advisable.

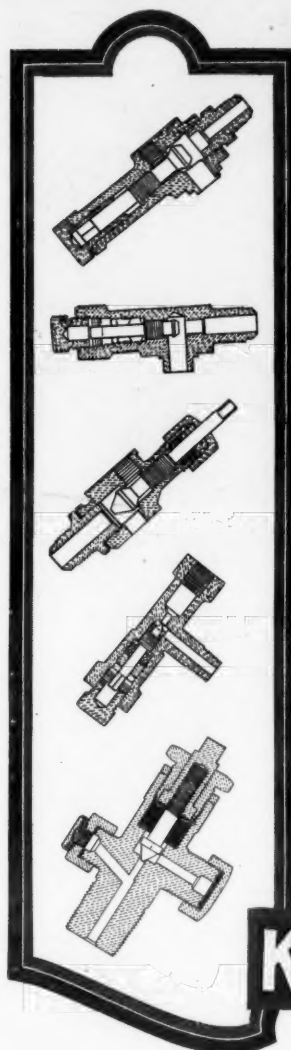
COMPETITION—It is always present, and without it the business would not be worth going into. Competition has built up this industry and will keep it alive. No manufacturer would be benefitted to find himself playing the game alone. An honestly built machine fears no competition that cannot be overcome by well-directed work.

DISTRIBUTION—Under this caption we must cover 85 per cent of the road. Some of the best minds in the merchandising field are giving this phase of the program the most searching inquiry and study. Various test plans are being tried out, that later merchandising campaigns may be based on them.

Is it possible, then, for a beginner to succeed in this industry? There is just as much opportunity for success in this field as in any other, and there is, perhaps, better opportunity. It will come to those who prepare for it, by studying the facts and figures of the industry. Success in any line means a great capacity for hard work, a careful study of the factors that lead to success, and intimate knowledge of the fundamental facts.

Explains Cabinet Record System Used by Dairy

A comprehensive and detailed account of the manner in which electric cabinet transactions are recorded by Eastern Dairies, Inc., is given by Howard K. Leatherman, general auditor, in the May number of the *Ice Cream Trade Journal*. Charts show several of the forms used in keeping these records.



*A solution to
your valve troubles*

**FORGED OR DIE CAST BRASS
MECHANICAL
REFRIGERATION**

**Shut off and Cylinder
Valves of Quality
in Standard Designs
or to your specification**

**KERO TEST MANUFACTURING CO.
Pittsburgh, Pa.**

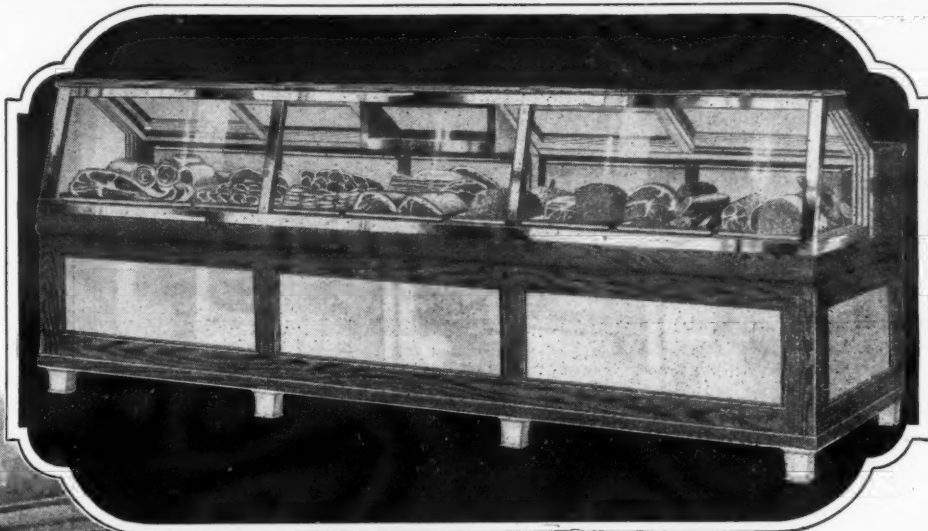
KERO TEST

THE WORLD'S LARGEST MANUFACTURER OF REFRIGERATORS FOR ALL PURPOSES

For ELECTRIC Refrigeration

McCray refrigerators may be used with any type of electric or mechanical refrigeration. All models are ready for immediate installation of the cooling unit. Remember quality in the refrigerator is vital to satisfactory service whether ice or machine is used.

Pure corkboard insulation, covered with waterproofing sheathing and sealed with hot hydrolene cement, insures perfect air-tightness in all McCray refrigerators.



A Refrigerator That SELLS Food

A REFRIGERATOR that sells food by displaying it temptingly, at the customer's eye-level—by keeping it fresh, wholesome, appetizing in appearance as well as flavor!

This is the McCray 103, shown above, with which merchants everywhere are building bigger business, cutting operating costs, avoiding spoilage and increasing profits.

Used with Electric Refrigeration

or ice, every McCray model insures efficient, economical, enduring service. Built upon basic patents, in accord with an unyielding ideal, McCrays are the accepted standard of refrigerator quality.

For 37 years McCray refrigerators have been giving daily proof in service of the staunchness which marks every hidden detail of construction—in stores, markets, hotels, clubs, restaurants, hospitals, institutions, florist shops, homes. Send the coupon for details about refrigerators for your needs.

MCCRAY REFRIGERATOR SALES CORPORATION
Lake St., Kendallville, Ind.

Salesrooms in All Principal Cities (See Telephone Directory)

MCCRAY
REFRIGERATORS
for all purposes

For further information
MAIL COUPON

McCray Refrigerator Sales Corporation,
Lake St.,
Kendallville, Ind.
Please send further information regarding refrigerators for [] stores, markets [] hotels, restaurants, clubs [] hospitals, institutions [] florist shops [] homes.

Name _____
St. _____
City _____
State _____
[] for electrical refrigeration [] for ice

THE WORLD'S greatest producer of Electric Refrigerators selected Ferro to lay out and install their porcelain enameling department.

Fifteen Ferro furnaces and fifteen Ferro forks and other necessary equipment are producing fine work in huge quantities, at low prices.

Incidentally, Ferro Enamels are used exclusively.

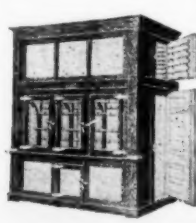
Why don't you use Ferro Equipment and Enamels? In the long run, they cost less.

"Buy from Bob"

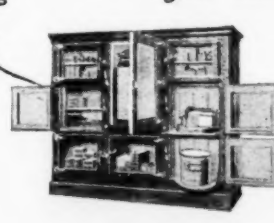
THE FERRO ENAMEL SUPPLY COMPANY
Cleveland, Ohio



McCray No. 150



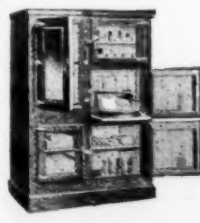
McCray No. 185



McCray No. 410



McCray No. 411



McCray No. 405

Successful Oil Burner Dealer to Push Electric Refrigeration



Reading from left to right are A. E. MacInnis, president of the Power Plant Engineering Co., Seattle, Wash.; R. S. Whaley, vice-president of the same company; Grant Fink, Manager of the Frigidaire Corporation, Seattle; and J. K. Knighton, salesmanager, Frigidaire factory branch, Seattle.

The Power Plant Engineering Co., Seattle, Wash., has recently been made special dealer for Frigidaire in Seattle, Tacoma and Portland, according to A. E. MacInnis, president of the firm, who is shown in the accompanying cut receiving the congratulations of Grant Fink, manager of the Frigidaire Corp., Seattle, upon the former's appointment.

This is another milestone in the successful record of the Power Plant Engineering Co., this company having taken the lead in the national sales contest of the Williams Oil-o-matic Heating Corporation in 1926, and repeating the performance in the campaign during April, 1927.

This year's sales record of 614 Oil-o-matics, valued at about one-half million dollars, is practically double that of last year. Added to the fact that the Power Plant Engineering Co. is reported to have sold about 70 per cent of the standard automatic oil burners in the Pacific Northwest, the record of this company is an outstanding achievement.

The sales campaign which won national honors on the Oil-o-matic field was marked by careful planning and several months of preparation, and this same organization is available to prospective purchasers of Frigidaire.

ELECTRIC AND GAS SYSTEMS DISCUSSED

(Continued from Page 1, Column 5)

R. S. Bell to Discuss Electric Refrigeration

"Electric Refrigeration," by R. S. Bell, Jackson; "Experiences in Making Contacts with Farmers in the Matter of Farm Electrification," by J. H. Flessner, Monroe; "Rural Electrification in Michigan," by Prof. H. J. Gallagher, department of agricultural engineering, Michigan State College; discussion of rural electrification progress by Eugene Holcomb, Jackson.

Report on Gas Refrigeration

Program of the gas association follows: President's address, by Charles R. Henderson, Ann Arbor; report of rate committee, by F. A. Newton, Jackson, chairman; report of gas refrigeration committee, by G. H. Waring, Grand Rapids, chairman; "Gas Refrigeration," by Prof. Hugh E. Keeler, mechanical engineering department, University of Michigan; discussion of house heating by gas from the standpoint of gas plant capacity; "One Solution of the Water Heating Business," by Howard Pett, Jackson; "Home Service Work," by Miss Frances Lauder, Battle Creek; "The River Rouge Gas Plant," by T. W. Weigle, Detroit; "The Marysville Gas Plant," by D. W. Hayes, Port Huron; "High Pressure Distribution," by Harry S. Parker, Muskegon; report of fellowship committee, by F. W. Seymour, Battle Creek, chairman; "Further Tests on the Instantaneous Carbonization of Crushed Coal," by Prof. D. J. Demorest, Ohio State University, and Prof. Alfred H. White, University of Michigan; "Experiments with the Manufacture of Ammonium Sulphate by the Gypsum Process," by George Ludwig, Grand Rapids.

GENERAL ELECTRIC DISTRIBUTOR LIST

(Continued from Page 1, Column 1)

Domestic Electric Co., 908 Pine St., St. Louis, Mo.
E. St. Louis Light & Power Co., 7 Collinsville Ave., E. St. Louis, Ill.
Electric Construction Co., 410 Demers Ave., Grand Forks, N. Dak.
Eastern Service Co., 131 State St., Boston, Mass.
Electric Refrigerator Co., 131 Third St., Milwaukee, Wis.
Electric Supply Co., 218 Main St., La Crosse, Wis.
Electric Refrigeration Co. of N. E., 733 Boylston St., Boston, Mass.
Electric Home Appliance Co., 1017 Quarrier Ave., Charleston, W. Va.
Eastern Hardware & Supply Co., 933 Atlantic Ave., Atlantic City, N. J.
Eastern Service Co., Lynn, Mass.
Electric Refrigerator Co., 120 Baker Arcade, Minneapolis, Minn.
Electric Supply Co., 159 Meeting St., Charleston, S. C.
Electrical Equipment Co., Inc., Morgantown, W. Va.
Electric Utilities Corp., 3096 E. Grand Blvd., Detroit, Mich.
E. S. & E. Co., 278 Broadway, Albany, N. Y.
E. S. & E. Co., Scranton, Pa.
E. S. & E. Co., Erie, Pa.
E. S. & E. Co., Wilkes-Barre, Pa.
E. S. & E. Co., Elmira, N. Y.
Electric Refrigerator Sales Co., 756 Broadway, Tacoma, Wash.
Florida Electric Refrigerator Co., 705 Florida Theatre Bldg., St. Petersburg, Fla.
Florida Power & Light Co., 1049 Ingraham Bldg., Miami, Fla.

General Engineering Co., 813 Walnut St., Reading, Pa.
Gerstenberger, Inc., 228 S. 16th St., Lincoln, Nebr.
The A. Fromme Lumber Co., 7th and Hulman, Terre Haute, Ind.
Grove Electric Co., 148 Main St., Ash-tabula, Ohio.
Philip H. Harrison Co., 589 Ogden St., Newark, N. J.
The Hines Mfg. Co., 602 N. Howard St., Baltimore, Md.
Hoosier Electric Refrigerator Co., 108 Monument Place, Indianapolis, Ind.
A. M. Hopkins, 2020 Ingersoll St., Des Moines, Ia.
Household Appliance Co., 117 E. Michigan Ave., Lansing, Mich.
Huntington & Guerry, River and Hammond St., Greenville, S. C.
Hurlbert Supply Co., 315 St. Louis St., Springfield, Mo.
Interstate Public Service Co., 129 E. Market St., Wild Bldg., Indianapolis, Ind.
Johnson Bros. Auto Supply Co., 117 S. St. Francis Ave., Wichita, Kans.
L. J. Johnson, 193 Elmwood Ave., Providence, R. I.
Kansas City Power & Lt. Co., 330 Grand St., Kansas City, Mo.
Knoxville Power & Lt. Co., Gay St., Knoxville, Tenn.
Kopecky-Strother Co., 124 Third Ave. E., Cedar Rapids, Ia.
Kelley-How-Thomson Co., 309 S. 5th Ave. West, Duluth, Minn.
Kentucky Utilities Co., Louisville, Ky.
L. R. Klose Electric Co., Kalamazoo, Mich.
Klaus Radio & Electric Co., Eureka, Ill.
Lake States General Elec. Supply, W. G. Nagel Division, St. Clair St., Toledo, Ohio.
Lexington Utilities Co., Louisville, Ky.
Lambert & Simpson, 65 E. 6th St., St. Paul, Minn.
R. G. Lockwood, 610 American National Bank Bldg., Roanoke, Va.
Lawrence Electric Co., 1609 S. 12th St., Lawrenceville, Ill.
Howard L. Lamprey, Elm St., Manchester, N. H.
Levy-Page Co., 107-9 City Hall Ave., Norfolk, Va.
Madison Gas & Elec. Co., 100 N. Fairchild St., Madison, Wis.
Morley Bros., Saginaw, Mich.
Modern Home Utilities, Inc., 541 Bank St., Waterbury, Conn.
McHenry Electric Co., 611 Market St., Parkersburg, W. Va.
Mountain Electric Supply Co., 92 Renne Ave., Pittsfield, Mass.
John L. Martin, 410 Congress St., Austin, Tex.
Morrison Electric Shop, 506 Northampton St., Easton, Pa.
The Maine Electric Co., 19 Commercial St., Portland, Me.
Morley-Murphy Co., Green Bay, Wis.
The Newton-Parsons Co., 123 Ann St., Hartford, Conn.
New Castle Hardware Co., 217 E. Washington St., New Castle, Pa.
National Electric Supply Co., 1328 N. Y. Avenue, N. W., Washington, D. C.
Northern Electric Co., 10th and Washington, Portland, Ore.
The Norris Co., 104 West Wood St., Youngstown, Ohio.
Ochiltree Electric Co., 505 Liberty Ave., Pittsburgh, Pa.
Ohio Valley Electric Co., Steubenville, Ohio.
Oklahoma Power Co., Okmulgee, Okla.
Our Phonograph Shop, 611 Church St., Nashville, Tenn.
Oklahoma Utilities Co., Hominy, Okla.
Perry Electric Co., 2900 Washington Ave., Newport News, Va.
Piedmont Electric Co., 86 Patton Ave., Asheville, N. C.
Portland Electric Power, 329 Alder St., Portland, Ore.
Puget Sound Power & Lt. Co., 7th and Olive St., Seattle, Wash.
W. A. Ramsey, Ltd., 74 Queen St., Honolulu, Hawaii.
Reid & Bywater, Inc., Ft. Worth, Tex.
A. C. Rogers, Inc., 1309 Knox St., Dallas, Tex.
G. W. Roberts, 324 D. St., Marysville, Calif.
A. C. Ripberger, Davenport, Ia.
J. E. Spence, 1310 12th Ave., Altoona, Pa.
Dallas A. Shafer & Co., Inc., 3419 W. Broad St., Richmond, Va.
B. K. Sweeney Electrical Co., 13th Ave. and Broadway, Denver, Colo.
Swank Hardware Co., Main and Bedford St., Johnstown, Pa.
Storz Electric Refrigeration Dept., 1906 Farnam St., Omaha, Nebr.
H. C. Tafel Co., 236 W. Jefferson St., Louisville, Ky.
A. Tucker Electric Co., 619 Jackson St., Topeka, Kans.
The Town of Wilson, Wilson, N. C.
H. M. Vondersmith, 38 S. Queen St., Lancaster, Pa.
Wright Bros., San Antonio, Tex.
Woodward, Wight & Co., New Orleans, La.
L. T. Woodruff, Inc., 22 W. Commerce St., Bridgeton, N. J.
Wisconsin Gas & Elec. Co., 225 South St., Waukesha, Wis.
The Willis Co., 404 Tuscarawas St., Canton, Ohio.
Weir Electric Co., 1807 Main St., Columbia, S. C.
Wheeler-Green Electric Co., 29 St. Paul St., Rochester, N. Y.
Young Electric Works, 1007 Broad St., Augusta, Ga.

Steelprest

Refrigerator Cabinet



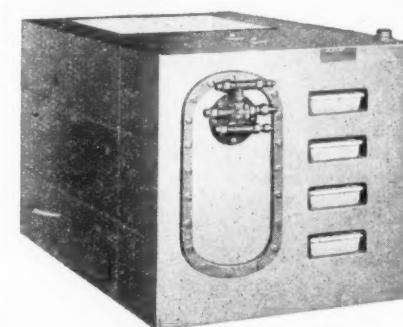
EVERY detail of the Steelprest Universal Refrigerator Cabinet was carefully, scientifically studied before adoption.

The result is, we believe, the finest refrigerator box that can be made.

Our familiarity with conveyor assembly and mass production methods has brought this superb cabinet down to a practical price. Details and specifications will gladly be submitted on request.

HEINTZ MANUFACTURING COMPANY
Front Street and Olney Avenue,
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THERMOSTATS Automatic Controls for Refrigeration and Oil Burners
SHAFT SEALS—FLOATS LIGHT STAMPINGS
HIGH PRESSURE CUT-OUTS
GOODNOW & BLAKE MFG. CO. 3840 BEAVER STREET DETROIT, MICH.



Kelvinator-Nizer standard Commercial Freezing Tanks Constructed from Wilder Metal

WILDER METAL Sheets Have Stood the Rigid Test of Over Four Years' Use in Brine Tanks

Prompt shipment of standard gauges and sizes from warehouse stock

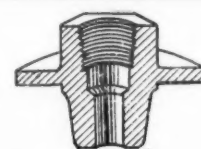
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WILDER METAL CO.
NILES, OHIO

E. T. L. Service for Domestic and Commercial Electric Refrigeration
Testing and experimental laboratory service for manufacturer, distributor, central station
Test data exclusive property of client
ELECTRICAL TESTING LABORATORIES
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EXTRA DRY ESOTOO
THE PUREST
SULPHUR DIOXIDE
Analysis Guaranteed

We have an agent, with our product in stock, near you
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F. A. EUSTIS, Secretary 131 STATE ST., BOSTON 2 RECTOR ST., NEW YORK



Hot Die Pressed Forgings

Valve bodies, tees, elbows, evaporator headers,—anything in the line of brass parts made to your specifications. Rough forgings only. The largest producers of refrigerator forgings in the country.

Send your specifications direct to
ROME MANUFACTURING COMPANY, Rome, N. Y.
Factory Representatives, F. B. Riley and Associates, 320 Beaubien St., Detroit, Mich.

REFRIGERATION STAMPINGS

We Specialize in the Design and Manufacture of

ICE CREAM CABINETS

We make them complete or furnish parts separately

Brine Tanks Cooling Units

Unit Supporting Bases and Perforated Metal Covers

METAL HOUSEHOLD REFRIGERATORS (Complete) OR CAN FURNISH

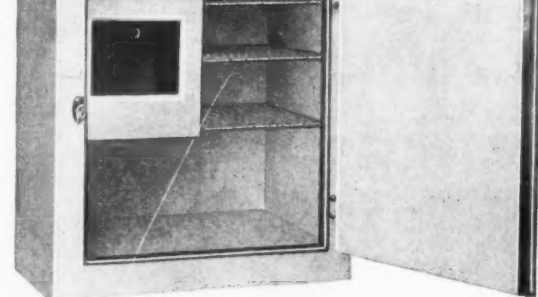
OUTSIDE STEEL PANELS, INSIDE LININGS, LOUVERED PANELS, LEGS, ETC., SEPARATELY

We Have a Competent Engineering Staff to Help You We Solicit Your Inquiries and Specifications

MOTORS METAL MFG. CO. - DETROIT MICHIGAN

Crystal and White Steel

APARTMENT REFRIGERATORS



No. 652

for Remote Installations

Are going into apartment homes all over the country

Recent installations have been made in the following cities:

Atlantic City
Buffalo
Cleveland
Detroit
Columbus
Cincinnati
Chicago
Minneapolis
Tulsa
Omaha
Sioux City
Fargo
Salt Lake City
Idaho Falls
Spokane
Salem, Ore.
Vancouver, B. C.

Electric refrigeration requires an efficient cork-insulated steel refrigerator like the "Crystal" or "White-Steel."
In a recent test of our No. 652 connected with a Universal machine a uniform temperature of 45° was maintained with the outside temperature ranging from 75° to 90° and with machine operating only one-third time.
Sizes up to 20 cu. ft. for self-contained units and remote installations.
Write for catalog and prices and sample wall section showing pure cork insulation.

CRYSTAL REFRIGERATOR CO., Fremont, Nebr.
MAKERS OF STEEL REFRIGERATORS SINCE 1910

Electric Refrigeration Patents

A Classified Record of All Electric Refrigeration Patents Issued Up to January 1, 1927—Sixth Installment

The United States Patent Office classifies all issued patents according to subject matter. The patents pertaining to refrigeration are contained in class 62, which is in turn divided into 178 sub-classes. Following is the sixth installment of the list of patents on iceless refrigeration machines and automatic control, compiled by H. R. Van Deventer.

Sub Class 142.

Liquid Coolers, Ice

Liquid receptacles peculiarly adapted to be cooled by ice and of a structure limited to the use of ice.

32,709, F. Nichols.	July 2, 1861
44,514, Carter & Orcutt.	Oct. 4, 1864
45,504, T. Larter.	Dec. 20, 1864
65,366, E. D. Finch.	June 4, 1867
71,899, Alfred Murden & Henry L. Cooper.	Dec. 10, 1867
85,125, H. Giesch.	Dec. 22, 1868
93,000, H. Pietsch.	July 1, 1869
96,390, A. P. Bussey.	Nov. 2, 1869
100,027, J. P. Gruber.	Feb. 22, 1870
106,607, G. M. Mowbray.	Aug. 23, 1870
108,448, A. P. Bussey.	Oct. 18, 1870
115,736, Thomas J. James.	June 6, 1871
117,221, Joseph R. Torres.	Aug. 18, 1871
118,646, Charles L. Ridgway.	Aug. 29, 1871
120,531, Antoine Piccoluga.	Oct. 31, 1871
122,384, George A. Higgins.	Jan. 2, 1872
124,465, John Weinberger.	Mar. 12, 1872
126,743, R. S. Jennings.	Apr. 30, 1872
128,956, C. M. Fellows.	July 16, 1872
130,848, W. H. Thayer.	Dec. 17, 1872
134,020, J. A. Whitney.	Dec. 17, 1872
136,150, E. D. Gird.	Feb. 25, 1873
138,195, A. F. Rick.	Apr. 22, 1873
138,478, J. W. Collier.	May 6, 1873
138,671, J. Matthews.	May 6, 1873
Re. 5,815, J. C. Kennedy, M. S. Andrews & W. P. Clark.	Mar. 31, 1874
140,629, T. W. Johnson.	July 8, 1873
146,461, J. C. Kennedy, M. S. Andrews & W. P. Clark.	Jan. 13, 1874
118,932, S. Colman.	Mar. 24, 1874
150,830, J. W. Collier.	May 12, 1874
152,213, L. B. Woolfolk.	Sept. 22, 1874
153,393, J. W. Taylor.	Sept. 22, 1874
156,089, J. C. G. Hupfel.	Oct. 20, 1874
161,797, J. K. Korff.	Apr. 6, 1875
162,986, F. W. Wiesbrock.	May 4, 1875
163,513, A. J. Morrison.	May 18, 1875
166,736, L. B. Woolfolk.	Aug. 17, 1875
171,204, L. B. Woolfolk.	Dec. 14, 1875
171,219, N. D. Ferguson.	Dec. 21, 1875
175,343, J. Downing.	Mar. 28, 1876
181,167, G. F. Heinichen.	Aug. 15, 1876
182,700, D. Pettengill.	Sept. 26, 1876
185,511, N. D. Ferguson.	Dec. 19, 1876
191,513, J. Bissonett.	June 5, 1877
203,952, E. E. Smith, Freeman & D. H. Burrill.	May 21, 1878
205,771, W. Taylor & M. Lortz.	July 9, 1878
211,986, W. Gee.	Feb. 4, 1879
212,951, W. Klinefelter.	Mar. 4, 1879
231,802, H. W. & S. S. Horton.	Aug. 31, 1880
233,726, D. N. Calkins.	Oct. 26, 1880
239,015, C. Schaufhaus.	Apr. 5, 1881
246,617, E. W. Kitchen.	Sept. 6, 1881
256,976, C. Colby & E. Brammhall.	Apr. 25, 1882
262,622, J. Schaufhaus.	Aug. 15, 1882
263,399, G. W. Evans.	Oct. 3, 1882
269,024, H. W. Dimock.	Dec. 12, 1882
272,654, H. D. Cogswell.	Feb. 20, 1883
280,405, J. Schaufhaus.	July 3, 1883
286,331, R. C. Richardson.	Oct. 9, 1883
286,967, T. W. Sheridan.	Oct. 16, 1883
293,805, J. C. Smith.	Feb. 19, 1884
296,095, C. F. Wisloh.	Apr. 1, 1884
307,206, L. F. Longmore.	Oct. 28, 1884
325,944, G. B. Dawson.	July 11, 1885
329,491, H. Haak.	Aug. 11, 1885
341,244, W. S. Hood.	May 4, 1886
362,812, S. G. Baldwin.	May 10, 1887
363,177, W. Slopp.	May 17, 1887
377,675, J. T. & C. Hays.	Feb. 7, 1888
383,518, A. K. Finlay.	May 19, 1888
383,993, V. W. Blanchard.	July 10, 1888
407,190, M. D. Foye.	July 16, 1889
409,292, L. Levy.	Aug. 20, 1889
409,955, W. Gee.	Aug. 27, 1889
414,272, T. I. Witting.	Nov. 5, 1889
419,718, J. H. Seitz.	Jan. 21, 1890
420,253, A. W. H. Smith.	Jan. 28, 1890
424,934, C. Simpson.	Mar. 18, 1890
424,936, R. D. Parks.	Apr. 8, 1890
433,739, J. W. Meyer & F. H. Shepherd.	Aug. 5, 1890
434,395, R. H. Little.	Aug. 12, 1890
436,469, W. W. Wilson & H. J. Van Tuxl.	Sept. 16, 1890
470,745, H. P. Conant.	Mar. 15, 1892
471,327, J. J. Lefebvre & J. O. Cessna.	Mar. 22, 1892
473,006, C. D. Iler.	Apr. 19, 1892
474,387, J. D. Iler.	May 10, 1892
474,603, E. R. Hutchins.	May 10, 1892
476,589, O. Zwietusch.	June 7, 1892
483,393, E. S. Murphy.	Sept. 27, 1892
497,743, W. Allerdice.	May 16, 1893
499,840, C. L. Kneeland.	June 20, 1893
500,737, F. E. Cady.	July 4, 1893
501,439, A. W. Meyer.	Sept. 5, 1893
516,611, A. Le G. Peirce.	Mar. 13, 1894
525,787, L. Leyendecker.	Sept. 11, 1894
528,523, G. P. Kates.	Nov. 6, 1894
535,526, G. P. Barron.	Mar. 12, 1895
542,465, F. W. Church.	July 9, 1895
555,446, J. F. Huber.	Feb. 25, 1896
581,085, J. Ruppert.	Apr. 20, 1897
611,225, H. G. Sweeney.	Sept. 20, 1898
626,315, F. W. Williamson.	June 6, 1899
636,210, F. Schner.	Oct. 10, 1899
642,851, A. Sidoti.	Feb. 6, 1900
646,162, W. Bachner.	Mar. 27, 1900
652,271, E. G. Howe.	June 26, 1900
656,072, J. O. Wild.	Aug. 14, 1900
662,168, F. A. Emerick.	Nov. 20, 1900
667,206, T. R. Faughaman.	Feb. 5, 1901
678,308, E. E. Murphy.	July 19, 1901
680,271, A. P. Orl.	Aug. 13, 1901
691,613, P. J. Doyle.	Jan. 21, 1902
693,506, C. A. Falk.	Feb. 18, 1902
700,005, T. S. Armstrong.	May 13, 1902
725,145, J. H. Rose.	Apr. 14, 1903
737,690, M. Wulff.	Sept. 1, 1903
754,216, T. Heintgen.	Mar. 8, 1904
755,422, B. Ady.	Mar. 22, 1904
762,429, J. P. Muth.	June 14, 1904
766,277, J. F. & D. Youngblood.	Aug. 1, 1905
826,337, F. D. H. Klusmeier.	July 17, 1906
827,931, S. S. Montanye.	Aug. 7, 1906
848,228, J. Ettel.	Mar. 26, 1907
849,988, W. Heilm.	Apr. 9, 1907
858,101, G. P. Petropoulos.	Apr. 9, 1907
882,862, V. F. Boehm.	Mar. 24, 1908
888,493, L. W. Harrington & B. Leonard.	May 26, 1908
901,663, G. A. Turner.	Oct. 20, 1908
902,333, F. G. Schneider & W. C. L. Ziehn.	Oct. 27, 1908
909,880, T. E. Fry.	Jan. 15, 1909
929,577, T. E. Fry.	July 27, 1909
942,165, H. S. Cornish.	Dec. 7, 1909
949,211, E. L. Boerner.	Feb. 15, 1910
992,506, J. D. Ingram.	May 16, 1911
991,163, G. A. Jakes.	June 6, 1911
1,001,490, L. R. Steel.	Sept. 26, 1911
1,001,927, L. R. Steel.	Oct. 2, 1911
1,020,982, W. Hopfinger.	Mar. 26, 1912
1,022,371, J. A. Leighton.	Apr. 2, 1912
1,026,635, C. E. Tomlinson.	May 14, 1912
1,065,442, H. Gieschel & C. A. Schroyer.	May 24, 1913
1,067,918, O. V. Hanna.	July 22, 1913
1,069,489, J. A. Smith.	Aug. 5, 1913
1,087,241, H. D. Kelly.	Feb. 19, 1914
1,099,914, W. J. Bohan.	July 19, 1914
1,205,096, O. L. Link.	Nov. 14, 1916
1,234,083, F. A. Philippi.	July 17, 1917
1,244,140, J. A. Steinmetz.	Oct. 23, 1917
1,266,764, F. A. Philippi.	Dec. 3, 1918
1,297,760, J. J. Walters.	Mar. 18, 1919

Sub Class 143.

Liquid Coolers, Ice, Bottle Type

Coolers for liquid in which the liquid is contained in a bottle and limited to apparatus in which ice must be the cooling material.

53,998, T. T. Markland, Jr.	April 17, 1866
59,687, Waldstein & Fauski.	Nov. 13, 1866
60,000, C. M. Whelden.	June 25, 1867
81,814, Muellens & Neuhaus.	Sept. 1, 1868
120,771, C. Avery & G. D. Atkins.	May 14, 1872
133,900, W. A. Jones.	Dec. 17, 1872
200,065, A. M. Kloczewski & V. Klobas.	Feb. 5, 1878
211,986, W. Gee.	Feb. 4, 1879
218,782, J. H. Schroeder.	Aug. 19, 1879
Re. 9,132, J. Matthews.	Mar. 30, 1880
222,503, W. H. Collins.	Oct. 5, 1880
253,700, P. M. Wether.	Nov. 13, 1882
511,048, C. E. Groves.	Dec. 19, 1893
514,575, E. H. Turner.	Feb. 13, 1894
592,781, M. Hertwig.	Nov. 2, 1897
601,748, F. G. Gutterberg.	May 31, 1898
644,325, F. G. Kammerer.	Feb. 27, 1900
648,904, C. W. Hart.	May 1, 1900
661,687, J. H. Brandt.	Nov. 13, 1900
662,168, F. A. Emerick.	Nov. 20, 1900
664,472, W. B. Fenn.	Dec. 25, 1900
668,867, J. T. Ashe.	Feb. 26, 1901
672,254, J. W. Baker.	Apr. 16, 1901
690,896, S. S. Shears.	Jan. 7, 1902
707,095, C. F. Conover.	Aug. 26, 1902
715,609, A. N. Rose.	Dec. 9, 1902
719,212, F. Gutterberg.	Jan. 27, 1903
730,337, M. Bonnetfort.	June 9, 1903
730,612, C. F. Conover.	June 9, 1903
735,295, H. C. Price.	Aug. 4, 1903
735,713, J. F. Cole.	Dec. 1, 1903
745,571, J. T. Cole.	Dec. 1, 1903
748,496, O. F. Hauser.	Dec. 29, 1903
752,810, H. G. Sweeney.	Feb. 23, 1904
755,723, V. S. Taylor.	Mar. 29, 1904
764,259, W. H. Shook.	July 5, 1904
774,986, F. G. Kammerer.	Nov. 15, 1904
778,012, C. F. Conover.	Dec. 29, 1904
Re. 12,352, J. T. Cole.	May 30, 1905
798,935, D. C. Walsh.	Sept. 5, 1905
808,692, G. E. Savage.	Jan. 2, 1906
819,506, E. O. Butt.	May 8, 1906
821,503, W. M. Keith.	May 22, 1906
839,312, J. C. Cory.	Aug. 6, 1907
845,180, W. H. Walter.	Aug. 27, 1907
863,339, W. A. Hynd.	Oct. 15, 1907
869,551, J. T. Cole.	Oct. 20, 1907
871,914, C. F. Conover.	Nov. 26, 1907
871,940, A. Koch.	Nov. 26, 1907
895,781, J. Newell.	Aug. 11, 1908
895,782, J. Newell.	Aug. 11, 1908
912,281, E. H. Brumner & I. L. Higgins.	Dec. 1, 1908
928,145, K. Nakagawa.	Feb. 16, 1909
928,146, K. Nakagawa.	July 13, 1909
928,908, W. G. Eads.	July 20, 1909
935,000, A. N. Rose.	Sept. 28, 1909
948,252, E. Russell.	Jan. 1, 1910
948,882, H. W. Hughes.	Feb. 8, 1910
958,418, A. H. Tyson.	Mar. 29, 1910
962,529, A. N. Rose.	June 28, 1910
979,440, A. W. Cram & W. A. Cluridge.	Dec. 27, 1910
990,344, C. H. Curtis.	Apr. 25, 1911
991,568, W. H. Walter.	May 9, 1911
991,715, P. Good.	May 9, 1911
992,506, T. D. Ingram.	May 16, 1911
996,127, W. E. Patnaude.	June 27, 1911
1,001,490, L. R. Steel.	Sept. 25, 1911
1,018,924, W. E. Patnaude.	Feb. 27, 1912
1,019,416, R. Bonnell.	Mar. 5, 1912
1,021,670, J. H. Garver.	Mar. 26, 1912
1,021,671, H. G. Corley.	Mar. 26, 1912
1,074,421, H. Hale.	Oct. 21, 1913
1,082,841, P. P. Adolph.	Dec. 30, 1913
1,086,425, G. Viney.	Feb. 10, 1914
1,157,927, W. L. Davis.	Oct. 29, 1915
1,183,197, D. R. Henderson.	May 16, 1916
1,217,673, H. W. Weaver.	Feb. 27, 1917
1,250,941, B. A. Baer.	Dec. 27, 1917
1,292,573, C. H. Boeck.	Jan. 28, 1919
1,325,427, H. W. Weaver.	Dec. 16, 1919
1,336,172, C. A. Tripp.	Apr. 6, 1920
1,480,754, W. F. Frien.	Apr. 8, 1921
1,551,572, G. Kneuper.	Sept. 1, 1925
1,565,198, E. Rasheta.	Dec. 8, 1925

Sub Class 144. Liquid Coolers, Ice, Barrel

Cooling apparatus peculiarly adapted to be applied to a barrel and in which ice must be used for the cooling medium if the apparatus performs its complete function.

18,263, Messenger & Rehahn.	Sept. 22, 1857
48,941, P. & F. Hinkel.	July 25, 1865
115,468, John M. Heiss.	May 30, 1871
200,925, C. A. Maus.	May 30, 1871
208,335, C. C. R. dmond.	Sept. 24, 1878
245,195, H. Mesenbrugg & H. Veschor.	Aug. 2, 1881
276,870, W. N. Beck.	May 1, 1883
325,418, A. Kurtz.	Sept. 1, 1885
642,243, K. Meran & R. P. Hoey.	Jan. 30, 1900
691,039, W. Worf.	Jan. 14, 1902
788,895, R. Fincken.	May 2, 1906
833,452, R. Fincken.	Oct. 16, 1906

Sub Class 145. Liquid Coolers, Ice, Filter

Liquid coolers having a filter for the liquid and means peculiarly adapted to the use of ice for cooling.

4,344, J. T. Craddock.	Dec. 31, 1845
25,398, E. Duchamp.	Sept. 13, 1859
39,271, J. S. Brooks.	July 21, 1861
53,988, W. O. Jones.	Apr. 17, 1866
126,771, H. T. Woodman.	Oct. 2, 1867
62,714, Waite & Watts.	Mar. 2, 1868
69,200, H. W. Fisher.	Sept. 24, 1867
82,651, D. E. Somes.	Sept. 29, 1868
100,027, J. P. Gruber.	Feb. 22, 1870
120,294, R. Long.	Oct. 24, 1871
127,556, James W. Brady.	June 4, 1872
127,557, J. Bruch.	Sept. 23, 1873
193,432, J. W. W. b.	July 24, 1877
236,529, E. L. Barber.	Jan. 11, 1881
249,608, R. H. Franklin.	Nov. 15, 1881
268,257, S. L. McBride.	Nov. 28, 1882
269,024, H. S. Dimock.	Dec. 12, 1882
274,339, S. Kacfas.	Mar. 20, 1883
276,533, E. C. H. J.	Apr. 24, 1883
277,933, S. H. Reynolds.	Apr. 24, 1883
280,263, E. J. Howe.	Nov. 27, 1883
293,562, F. E. Cady.	Feb. 12, 1884
296,095, C. F. Wisloh.	Apr. 1, 1884
296,673, F. E. Cady.	Apr. 8, 1884
305,523, D. H. Logan.	Sept. 23, 1884

346,849, J. Hartmeyer	Aug. 3, 1886
354,687, R. Chester	Dec. 21, 1886
386,244, S. Gluck	July 17, 1888
413,366, W. Morrow & W. Symington	Nov. 19, 1889
460,490, D. Yates & B. Brock	Sept. 29, 1891
494,901, O. H. Smith	April 4, 1893
500,737, F. E. Cady	July 4, 1893
531,838, G. L. Davis & N. K. Wright	Jan. 1, 1895
543,677, G. L. Davis & N. K. Wright	July 30, 1895
579,254, J. H. Brady	Mar. 23, 1897
590,020, W. Myers	Sept. 14, 1897
605,500, D. B. Morrison	June 14, 1898
615,941, W. G. Winchet	Dec. 13, 1898
644,325, F. G. Kammerer	Feb. 27, 1900
648,904, C. W. Hart	May 1, 1900
669,127, A. C. Spitznagel	May 1, 1901
673,722, T. T. Moulton	May 7, 1901
713,197, J. E. Binn	Nov. 11, 1902
827,931, S. S. Montanye	Aug. 5, 1906
835,123, G. F. Isenropulus	June 7, 1907
885,129, G. F. Isenropulus	Aug. 21, 1908
902,078, J. Havassy	Oct. 27, 1908
928,145, K. Nakagawa	July 13, 1909
956,698, M. Gessler	May 3, 1910
964,696, J. Roche	July 9, 1910
980,552, J. Roche & C. A. Schroyer	Dec. 31, 1913
237,733, H. T. Allen	Dec. 31, 1917
289,559, T. J. Sheehan	Aug. 21, 1918
551,572, G. Kneuper	Sept. 1, 1925
580,300, J. E. Howorth	April 13, 1926

Four Representatives of the General Electric Step Out with Walter Seeger



Reading from left to right: Walter Daily, C. E. Roesch, and P. B. Zimmerman of General Electric; Walter G. Seeger of Seeger Refrigerator Co., and W. T. White of General Electric.

APARTMENT HOUSE ICE GRAFT EXPOSED

(Continued from Page 1, Column 1)

"Testimony was given by Frank Lodispodo, an ice dealer for fourteen years, who also testified that the Metropolitan Ice and Coal Dealers' Union virtually had stopped dealers from infringing on competitors' territory. His testimony indicated that the small cellar dealers, instead of having to struggle to survive, often are the owners of lucrative businesses.

Urged Rate Agreement, He Says

"Lodispodo, who lives at 396 Hopkins Avenue, Astoria, and who has done business for eight years at 110 Jamaica Avenue, Astoria, said that Lorenzo De Maria, one of the organizers of the union, often had told the dealers to stop fighting among themselves because territory and customers would be apportioned equitably from headquarters. He also urged them, Lodispodo said, to keep the price of ice up to 60 cents a hundred pounds.

"De Maria's pleas to stop competition apparently had effect, Lodispodo saying that no one ever had taken a customer from him during the time he was a member of the union. He admitted he no longer was a member, having resigned two months ago after Attorney General Ottinger questioned him about the organization's activities.

"The initiation fee of \$5 and the \$2 a month dues were very beneficial, Lodispodo said, because they protected a dealer's investment which, while not much in the way of equipment, often ran high in the purchase of territory. Apartment houses, he said, cost the dealer from \$500 to \$2,000, according to size. This money is paid to landlords, agents or superintendents, he said, for the right to sell in new buildings.

Organizer on Stand

"Nicola Pace, the other witness of the session, said the union had been organized by himself, Tony De Maria, Lorenzo De Maria, Leonardo Sicilian and John Sicilian. He admitted that he and the De Maria brothers were not ice dealers but members of the Amalgamated Clothing Workers of America. He denied there was any connection between the ice dealers and organized labor.

"The ice union was organized, he said, because the founders wanted to see the dealers get a little more for their product and to 'help Americanize them.' The two Sicilians, he continued, are ice dealers. He testified that there were 1,000 members of the organization, and that Lorenzo De Maria was its only paid organizer, the others being volunteers.

"Where the funds of the union went he did not know, and Mr. Hazleton closed on this note, directing Deputy Attorney General William B. Groat to

'go out and find out where the money goes.' Mr. Groat asked permission to bring contempt proceedings against Lorenzo De Maria for his failure to answer a subpoena, and Mr. Hazleton assented."

REQUESTS FOR INFORMATION

The following inquiries have been received by ELECTRIC REFRIGERATION NEWS. Readers who can supply information on these subjects are invited to write at once, referring to the Query number.

Three-Quarter Ton Unit

Query 22—"We would be obliged if you would give us the names of some of the manufacturers of a good refrigerating unit with a capacity up to three-quarters of a ton, using either ammonia or sulphur dioxide."

Nuts and Fittings

Query 23—"Please advise the name and address of a manufacturer producing a standard stock of Michigan nuts and fittings other than flange fittings, for use in connection with 5/8 inch copper tubing."

First Patent

Query 24—"Could you give me information regarding the first manufacturers to produce electrical refrigerators? Where did it take place and how quickly were they developed? Could you also tell me who first invented the idea of electrical refrigeration? To whom did he sell—if he did sell—the patent rights?"

Sulphur Dioxide

Query 25—"Will you kindly refer to us a number of factories who are manufacturing sulphur dioxide suitable for refrigerating purposes?"

Compressors

Query 26—"I would appreciate your letting me have a list of the manufacturers of single cylinder reciprocating compressors for household refrigeration use."

Bel lows

Query 27—"Could you please give us the names and addresses of the manufacturers making a small metal bellows, which is used in connection with gauges, electrical switches, etc."

MOST COMPLETE, MOST INTERESTING, MOST ENLIGHTENING

"Your publication is the most complete, most interesting, and most enlightening of any that reaches my desk, and this word of praise, I'm sure, is certainly deserved by the management."—G. E. Hosch, sales manager, San Diego, Cal., office Frigidaire Corporation.

SPECIFY ANSUL SULPHUR DIOXIDE

The Product with a Factor of Safety

ANHYDROUS SULPHUR DIOXIDE

Absolute Protection for Refrigeration

ANSUL CHEMICAL COMPANY
MARINETTE, WIS.

NEW BOOKLET AND LEAFLETS

Ferro Enamel

"Men and Methods" is the title of a 9 x 12 inch booklet published by the Ferro Enamel Supply Company of Cleveland, which pictures seventeen men connected with the company, telling briefly of the contribution that each is making to the enameling industry. Methods employed in porcelain enameling are discussed. Comments upon the work of the company complete each page.

Esotoo

Clarence Morgan & Co., 355 West Ontario Street, Chicago, distributors of "Extra Dry Esotoo" sulphur dioxide for household refrigeration, have issued a folder describing this product, which is manufactured by the Virginia Smelting Company of West Norfolk, Va.

Monel

A folder listing all publications dealing with Monel Metal has been issued by the International Nickel Company of New York, N. Y. General booklets, those dealing with specific applications, and technical ones, are listed as well as the issues of *Inco*—a magazine for metal users—nickel steel bulletins, working instructions, reprints of advertisements, and price schedules. Eighteen publications are listed as "new literature," and include "Twenty Years of Monel Metal," by Robert C. Stanley, who reviews the history of the production of this material.

Rex

Rex Manufacturing Company, of Connersville, Ind., has recently issued a three-color booklet picturing and giving specifications of Rex steel cabinets for electrical or mechanical refrigeration, built "to meet exacting requirements in strength, beauty and economy in use."

Mueller

Mueller Brass Company, of Port Huron, Mich., has just issued a folder illustrating Mueller standard electric refrigeration parts and special parts made from Relleum brass forgings. Catalogue numbers are used with each illustration, as well as complete specifications, so that the folder serves also as a catalogue.

American Radiator

"The History of the Radiator" is the title of a folder, whose front page is devoted to a letter, published by the industrial division of the American Radiator Company, 816 South Michigan Avenue, Chicago. That radiators of various kinds did not simply happen, but developed for specific purposes, is brought out in the folder, which lastly discusses radiators for refrigeration. Illustrations are used, including one of a domestic refrigerating unit.

Allison

A three-color folder, telling of the construction and also illustrating the Allison electric refrigerator, product of the Domestic Electric Refrigerator Corporation, 2 West 46th Street, New York, has been received. Complete specifications of two models are also given.

Campbell-Shirk

Refrigerators for hospitals, restaurants, clubs, hotels, and other institutions are illustrated in Catalogue No. 11 of the Campbell-Shirk Company, of Milwaukee, designers and builders of refrigerators of any practical size or design, following the specifications of the buyer. A portion of the booklet is devoted to the construction of this product, while the remainder deals with highly specialized types of refrigeration. A list of recent hospital and institution installations is included, with photographs of some of them.

CENTRAL STATION PUBLICATIONS

Nela-Graph

The *Nela-Graph*, issued by the Southeastern Headquarters, National Electric Light Association, Atlanta, Ga., "whenever there's something to say," reviews, with clever quips, and in a personal, chatty way, the news of that section of the country regarding the N. E. L. A. No. 14 is a mimeographed, 12-page booklet, and is illustrated.

Kole-Fax

Issues sixteen, seventeen and eighteen of "Kole-Fax," mimeographed campaign publication of the Georgia Power Co., Atlanta, have been received. The last shows that \$317,970 worth of electric refrigerators have been sold throughout Georgia between May 4 and June 23. The campaign closes July 1.

Sales Log

The *Sales Log*, also a Georgia Power Company publication, of June 27, has been received. This number features "Kitchen freedom," as the slogan of mid-summer selling activities.

Power Events

Power Events for June, 1927, published by the Buffalo, Niagara & Eastern Power Corporation, Buffalo, N. Y., has been received. This is a sixteen-page magazine giving news of the personnel of the corporation and feature material of interest mainly to those connected with the organization.

S. B. Parsons Appointed Kelvinator District Sales Manager at Austin, Texas

S. B. Parsons, for four years connected with the sales force of the J. R. Reed Music Co., of Austin, Texas, has been appointed district sales manager for eleven Central Texas counties by the Kelvinator Corporation. Mr. Parsons will have his headquarters in Austin with the Exide Battery Company, distributors of Kelvinators in this territory.

With the announcement of this appointment, plans have been made for building up a centralized sales force which will conduct an intensive selling campaign. The present building will be enlarged and improved in order to take care of the increasing business, and arrangements have been completed for rendering quick shipments to all points in this territory.

Recognition of the demand for electric refrigeration is shown in the increasing orders which are coming in every day. A local real estate firm has placed an order with this company for 25 systems to be installed in a colony of brick homes now under construction.

Mr. Parsons is by no means new to the refrigeration field, having served in the Kelvinator organization before joining the Reed sales force. He is returning to his old profession because he recognizes "the fruitfulness of this business, and the prospects that exist in the Austin trade territory."

New Appliance Manufacturer

The La Crosse Household Appliance Company, La Crosse, Wis., has been incorporated for \$10,000 and will manufacture heating machinery, electric refrigerator, etc., according to a recent announcement. Incorporators are George Schweizer, Leonard Funk and David McKinney.

MANY INQUIRIES FROM FIRST ADVERTISEMENT

"We are very pleased to advise you that we have received inquiries from several sources since inserting our first advertisement."—J. S. Forbes, Kerotest Manufacturing Co., Pittsburgh.

AUTOMATIC MERCURY **CON-TAC-TOR** **CONTROLS SWITCHES**
Simple • Dependable • Accurate
ABSOLUTE CONTACTOR CORPORATION
ELKHART, INDIANA

REFRIGERATOR CABINET SALESMEN WANTED

Salary, commission and bonus. Only men with unusual record of sales success need apply. Old, established firm with national reputation, large resources and highest quality product of universal acceptance. Write, giving age, experience, full history and reference to A. A. GRAY, 133 W. Washington St., Chicago, Ill.

"Air-Way" Condensers

Any size, any capacity. They look and act the part. The "AIR-WAY" condensers are made to meet the requirements of any equipment. They are highly efficient, keeping head pressures remarkably low. You will like them and the price is right.



FEDDERS MANUFACTURING COMPANY
BUFFALO, N. Y.

Factory Representatives, F. B. RILEY & ASSOCIATES
320 Beaubien Street, Detroit, Mich.

CLASSIFIED COLUMN

Note: Replies to advertisements with "box numbers" should be addressed to Electric Refrigeration News, 554 Macabees Bldg., Detroit, Michigan.
Advertising rates for this column only: Positions wanted 40 cents per line for one insertion, \$1.00 per line for three insertions. All other classifications, 50 cents per line for one insertion, \$1.25 per line for three insertions.

POSITIONS WANTED

CHIEF ENGINEER available. Long experience with Frigidaire, Servel, Nizer, Copeland, and as consulting engineer to numerous other manufacturing companies. Hold valuable patents on controls and seals. Want a hard job with problems to solve and with opportunity and authority to accomplish results. Address Manuel Lassen, 3840 Beaver St., Detroit, Mich.

Refrigeration Engineer will design and build for reliable concern a belt driven or direct connected household ice machine that is efficient, compact and positively quiet. Or I can improve your present machine by eliminating oil pumping, seal troubles, noisy expansion valves, etc. Well acquainted with patent situation. Address Box 36.

Junior sales executive, fifteen years experience in selling, conducting intensive sales campaigns, handling salesmen. Two years territory supervisor electrical refrigeration working new dealer connections, contracting with power companies, organizing sales forces. Age 35, college man. Prefer position in west or middle west as branch manager or manufacturer's agent. Box 37.

Advertising man at present contacting with electric refrigeration industry desires connection with agency or advertising department of manufacturer. Know facts and data about this rapidly growing industry which are of definite value. Address Box No. 40.

PACIFIC COAST DISTRIBUTION

Sales executive with thorough knowledge of refrigeration situation on Coast will act as branch manager or manufacturer's agent. Three years distributor for leading make. Capable of organizing sales forces, building dealer organization, conducting training schools. Might undertake financing of distributorship for financially sound maker with satisfactory complete household and commercial line for single and multiple installations. Box 42.

Private concern doing \$25,000 per year, would like to get in touch with some one interested in Electric Refrigeration, with a view to extending the business. Marsdens Store Fixture House, James St., East Providence, R. I.

Brine Tanks and Expansion Valves

An experience gained by making many thousands of brine tanks for one of the three largest Manufacturers of Machines is expressed in our new standard line of **BRINE TANKS** and **EXPANSION VALVES**. We can meet your requirements in standard tanks in any cabinet from 4 to 40 cubic feet,—any refrigerant.

Ask for our bulletins on these appliances,—liquid receivers, liquid filters, strainers, ice trays, etc. You profit by our standardization. Write today to